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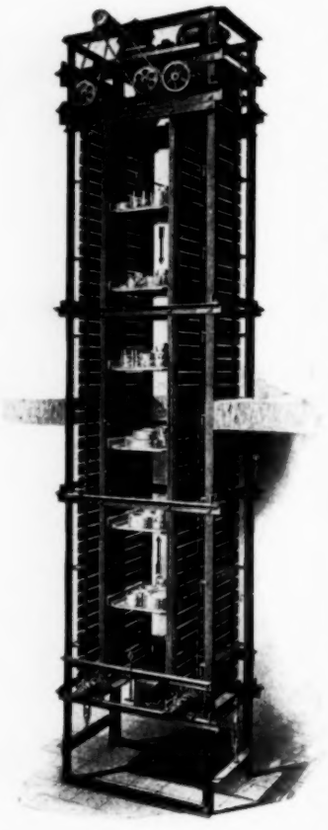

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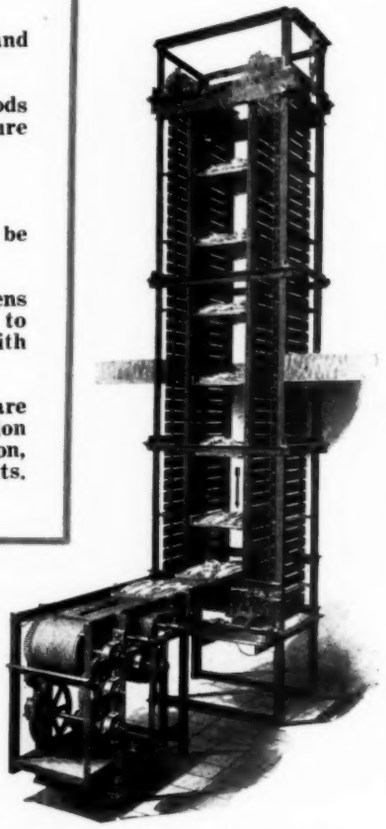

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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XXIX *July, 1927* No. 1

WHAT IS THE HOSPITAL'S OBLIGATION TO THE INTERN?

By A. C. Bachmeyer, M.D., Superintendent, Cincinnati General Hospital,
Cincinnati

THE subject of intern service has been given considerable prominence during the past few years in discussions before hospital associations, the Council on Medical Education and Hospitals of the American Medical Association and the Association of American Medical Colleges. Once each year, the *Journal of the American Medical Association* devotes one issue to the question of hospital service, a large portion of which is taken up by data concerning intern training.

Since 1914 the American Medical Association has published a list of institutions that it has approved for intern training. The latest list contains the names of 578 hospitals providing 4,952 internships. This is in excess of the number of graduates from medical schools. No hospital of less than 100-bed capacity is considered for approval by the association. This does not mean that smaller institutions cannot provide satisfactory intern service but indicates that in the larger institutions with greater clinical facilities the intern can find wider opportunity for training and experience.

Practical Experience Is Necessary

The advantage to the graduate of serving at least one year of internship has been generally recognized. At the present time, twelve states and as many medical colleges require a year's practical experience in hospitals or allied services, either before the degree of doctor of medicine is conferred or before license to practice is granted.

It has been said that the competency or efficiency of the medical graduate to practice his profession at the time of his graduation is about 50 per cent, and that a year of internship will increase it to 70 or 75 per cent. This can only be true, however, if that year of service is spent in an institution that fully recognizes its obligation to the intern and so organizes its service that it will have the highest possible educational value.

What Graduate's Training Comprises

The graduate leaving the college of medicine has completed a basic preparation for the practice of medicine that has required a minimum of six years. He has been thoroughly grounded in the sciences that are fundamental and for at least two years has been in daily contact with patients in the wards and dispensary of the teaching hospital connected with his college. His clinical work has been under the closest supervision. His contact with the patient, of rather meager extent in the beginning and largely in the role of spectator, has gradually been increased, so that as a clinical clerk and senior student he has been held responsible for more or less of the routine work involved in the medical care of the patient, particularly in so far as medical history, physical examination and diagnosis is concerned. His work has been constantly scrutinized, verified and corrected by his various instructors until he has become fairly proficient. His instructors have endeavored to imbue him with high ideals and to equip him with the "tools of learning," so that through their use he may attain proficiency in the practice of medicine. However, he has not been held primarily responsible for the entire care of the patient and has had no opportunity to direct treatment.

His graduation is an indication that the medical

*Read at the meeting of the Ohio Hospital Association, Columbus, Ohio, April 4 and 5, 1927.

faculty considers him capable of beginning the practice of his profession, and usually before beginning his service as an intern he has further received the stamp of approval of the licensing body of the state and has qualified to enter the actual practice of medicine.

Intern Must Conform to Policies

So qualified, he enters the hospital as an intern. He desires to acquire further training and experience before beginning an independent life as a physician, and realizes that an internship offers him opportunities to advance his knowledge and perfect his technique, such as would otherwise not be possible. He should realize, and I believe the vast majority of graduates do realize, that he is only one member, and a comparatively minor one, of the hospital organization, and as such he must conform to the policies and regulations prescribed by the institution.

The question for our hospitals to decide is whether or not they will function as educational institutions and practice fields for these young men and women. If they are not willing to see to it that the intern benefits to the greatest possible extent by his service, then they should not ask him to waste a year of his life in their employ.

The hospital, and particularly the superintendent and the medical staff, must appreciate the fact that they have an obligation to the intern. Every member of the staff should treat him as a colleague. He should be given every possible opportunity to extend his knowledge.

Give Intern Opportunities

He should be assigned to a definite service and be held responsible for a liberal share of the care of every patient on that service. He is required to do certain routine and often uninteresting work, but the staff should see to it that he has ample opportunity to do work of an interesting nature. They should realize that they occupy the role of leaders and instructors. If the intern questions their procedure or the therapy they have ordered, it is only proper that they discuss the question with him in a fair and instructive manner, just as they would with a colleague called in consultation.

Every patient in the hospital should be accessible to the intern. Many staff members seem to have the idea that their private patients will object to the intern's presence and service, but it has been my experience that this is not the case and that in many institutions the intern's service to and contact with the private patient differs but little, if at all, from his contact with the "free" patient. This is entirely dependent upon the attitude of the attending physician and is subject for the most part to his control.

To be of greatest value, the internship should offer service in the four major clinical divisions—internal medicine, surgery, pediatrics and obstetrics. With these there should be correlated work in pathology, both gross (autopsy) and microscopic, in anesthesia, in all phases of laboratory work and in minor surgery. If time and circumstances permit, experience in one or more of the specialities may be included, but it is my opinion that at least one year's experience and training in the four major divisions should precede specialization.

While it is desirable that the intern be kept busy in actual service to the patients and, further, that he be within easy reach for all emergencies, it is also essential that he be given opportunity and time to read and study and to undertake investigation. He must also have time for recreation.

Hospital Must Be Well Equipped

The hospital that undertakes intern training must be a fully equipped one. Its laboratory and x-ray department should be adequate. It should maintain a working medical library to which the intern has ready access and which he is encouraged to use. The staff should be interested in research activities and should stimulate the interns to participate in such work.

The intern should also participate in the clinical conferences of the staff and should be permitted and encouraged to present case reports before the staff and to engage in the discussions incident to such meetings. Various ways and means will develop whereby the intern's work in the institution can be made interesting and attractive to him and of definite educational value.

The hospital should also see to it, that the intern's quarters are as attractive as possible and that facilities or opportunities for recreation are provided, for it is just as true that "all work and no play makes Jack a dull boy" as it is that "idleness breeds mischief."

Make Service Worth While

The hospital that fully realizes its obligation to the intern, whose medical staff takes an active interest in his professional and social welfare and accepts him as a member of the family, will find that disciplinary measures will seldom be found necessary. Such an institution will have little difficulty in obtaining desirable men to serve as interns. Interns quickly report to the oncoming graduates concerning their service, and while it is true that an increasing number of hospitals are

paying for intern service, a large number have not found it necessary to do so and still have many applicants for their appointments. Make your service worth while to the intern and he will find a way to finance himself for another year in order to obtain the benefits that such service offers.

Aside from the strictly professional training, there is at least one other obligation that the staff owes the intern, and that is training by precept and example in the ethics of his chosen profession.

As a student the intern has heard one or more lectures upon the subject of ethics and has become acquainted with the ideals and ambitions of his profession. Later, however, if he finds the members of the staff distrustful of each other and destructively critical of their colleagues, his outlook on life may be injured. It is obligatory upon the staff that they deal honestly and ethically with each other, that they develop an esprit de corps in their group, and in this way instruct and stimulate the young man to strive for the highest ideals of his profession.

How to Influence Intern

I should like to recommend every hospital administrator to obtain a copy of the hospital number of the *Journal of the American Medical Association* issued under date of March 12, 1927, and read it carefully. I should also like to suggest that medical staffs give careful attention to the organization of the intern service and evaluate it in comparison with the content of the paper read by Dr. George E. Follansbee, chief of staff, St. Alexis Hospital, Cleveland, at the Congress on Medical Education and Hospitals recently held in Chicago and published in the issue of the *Journal of the American Medical Association* just mentioned.

In closing I should like to quote from the last paragraphs of Dr. Follansbee's paper:

"The intern comes to us fresh from the medical school with all the enthusiasm of the graduate entering upon his life's work. By our treatment of him we can kill that enthusiasm, make him lazy and discontented, help him to forget what he has so recently learned and turn him out from our hospital with the one idea of making as much money as he can with as little effort as possible. Or we can nurse his ardor, guide his efforts, teach him the practical uses of his knowledge and develop his ability and interests so that he leaves us with his enthusiasm unimpaired, but sobered and steadied by an appreciation of the responsibility that is his when he takes into his keeping the health and life of those who intrust themselves to his care."

NEW JERSEY HOSPITALS OFFER FACILITIES FOR POSTGRADUATE STUDY

An editorial in the April issue of the *Journal of the Medical Society of New Jersey* calls attention to postgraduate courses to be made available to county society members in New Jersey through the cooperation of some of the larger hospitals of the state, which are utilizing their abundant clinical material for teaching purposes. The Hackensack Hospital, Hackensack, has made the following announcements:

X-Ray Friday Afternoons at 2 O'clock.

"In order to make its facilities known and to assist physicians in the interpretation of radiographs, the x-ray department will hold a clinical session every Friday afternoon from 2 to 3 o'clock. Dr. R. E. Knapp will demonstrate x-ray plates in correlation with the pathology, and will then add short talks on the many conditions in which x-rays are of value in diagnosis and treatment.

Physiotherapy Friday Mornings at 10 O'clock.

"In response to many inquiries from physicians who are installing apparatus in their offices or who wish to learn the uses of physical agents, the hospital has arranged for a clinic every Friday morning from 10 to 11 o'clock in the physiotherapy department.

"This field of work is new and growing steadily. The hospital has installed a department with equipment to cover every phase of the work. The number and variety of patients recommended for treatment, now from thirty to forty a day, offer such excellent material that the hospital feels it should be made available to any physician who is interested.

"Although the department welcomes the visits and inquiries of the physicians at any time, Dr. S. T. Snedecor will conduct a clinic at this hour, with demonstrations of the apparatus, the technique of their applications, and short talks on the many kinds of disease in which physical treatment is of value."

This is an excellent example for other hospitals.

Dr. George O'Hanlon, superintendent, Jersey City Hospital, Jersey City, is arranging to start some similar series of lectures and clinical demonstrations at his institution. The staff of Elizabeth General Hospital, Elizabeth, is now considering the proposition. At the City Hospital, Newark, Dr. Harrison S. Martland has been for some time holding a medical conference each Monday evening at 10 p. m., using the autopsy material that comes under his official observation as city physician.

The many excellent hospitals in this state make it possible to have at least one central point of graduate study in every county, and it is suggested that every member of each county medical society should be cordially invited to attend and should exhibit an active interest.

The plan is easy of execution. It calls for no special investment of funds. The teaching material is at hand in every hospital. The staff constitutes an existing faculty, and in assuming the role of teachers the members are not presumptuous, not pretending to skill as educators, but are merely offering to share with their colleagues the opportunity to study medical problems of the day. Incidentally, the teacher of the moment will probably find that the effort to act as instructor will make him a better student and the knowledge gained by this course will be his recompense for the extra labor.

Similar courses are available in New York State, under what has come to be known as the Kings County Plan, and have been productive of excellent results.

IS YOUR X-RAY MACHINE EFFICIENT?

By J. L. Weatherwax, A.M., Physicist, Department of Radiology, Philadelphia General Hospital, Philadelphia

WITH the discovery of roentgen rays in 1895 and radium in 1896, a new therapeutic agent became available in the field of medicine.

The development of roentgen ray machines steadily progressed with the development of roentgen ray tubes. Our first roentgen ray tubes were filled with gas and continued in general use until the development of the evacuated Coolidge tube. The tube development has made it possible gradually to use higher voltages on the target, thereby attracting the negative electrons given off from the hot filament with a greater force. By increasing the speed of the electrons bombarding the target, x-rays of shorter wave lengths were produced—hence, x-rays with more power to penetrate farther into the tissue before being absorbed.

X-ray therapy was first applied to the treatment of skin lesions, because the first x-rays had little penetrating power. As x-rays of greater penetrating power were produced, x-ray therapy was gradually extended to the treatment of deep seated tumors.

The first question to arise in the use of x-ray therapy is how we are going to measure the dosage of x-ray radiation. We are familiar with the use of the pipette and the balance in the measurement of drugs and chemicals, but how are the invisible x-rays to be measured since they have no weight, any more than light has? If we can get a measure of the x-rays by their action on some other substance that will record different intensities, then we have our x-ray balance.

Obtaining Ratio of Intensities

There are two practical methods of obtaining the ratio of intensities. First, the blackening of a photographic film by x-rays. The blackening of a photographic film is proportional to x-ray intensity for x-rays of low penetrating power. For x-rays of short wave lengths or high penetrating power, the blackening of a photographic plate is not in direct proportion to the x-ray intensity, so this method has its limitations. The second method is based on the fact that x-rays bombard air or any gas atom, causing the atom to lose one or more negative electrons, leaving the remainder of the atom with a positive charge of electricity. The separation of the gas atom into its respective charges is called ionization of gases.

As the intensity of x-rays changes, the number of gas atoms splitting up into positive and negative electricity will change. Therefore if we can find an apparatus to measure the variation in the number of positive and negative charges of electricity made in any gas per second, then we have a means of indirectly measuring the output of x-ray intensity. We constructed such an apparatus for determining the intensity of x-rays under any condition, and found that we could measure the intensity of x-rays of low penetrating power as well as high penetrating power.

Is your roentgenologist giving measured dosages of radiation therapy and has he had the physical laws governing radiation correctly interpreted? The lack of knowledge of the physical laws pertaining to radiation has resulted disastrously in the past to both patients and physicians. The accidents to patients have increased to such an alarming extent that the roentgenologist is compelled to pay high insurance rates for his protection.

How to Protect Roentgenologist

The problem of protecting the roentgenologist and his associates is being developed by the keen competition among manufacturers supplying roentgen ray apparatus and by committees on protection representing roentgen ray societies. The high voltage roentgen ray tubes are being enclosed in lead containers, while safeguards are being developed in roentgen ray diagnostic apparatus to protect the roentgenologist from radiation and high voltage. It is only the foolhardy roentgenologist who today allows himself to be over-radiated.

The problem of protecting patients from too much radiation and still giving them sufficient radiation to be of the greatest possible value, is not so simple. The writer has measured the various constants of roentgen ray equipment in which the output of radiation intensity fell as much as 15 per cent below the normal or average, and in addition to this loss the roentgenologist had been giving 60 per cent of the dosage for his equipment. A full x-ray dosage is usually defined as that quantity of radiation necessary to produce an erythema, or reddening of skin of the average patient in a week or ten days, followed by a tanning in about a month.

It is true the roentgenologist will never overradiate a patient by giving only 50 per cent of the dosage he thinks he is delivering, but is the patient receiving sufficient radiation to be of much

therapeutic value? The writer found wide difference in the intensity output of x-radiation from different installations in various parts of the country. Since the roentgenologist has never had a measure of the output of radiation of his x-ray equipment, he plays safe by giving less radiation than he would if he accurately knew his dosage. The result is that the patient is not receiving sufficient radiation. The roentgenologist is using the guess method which is never good radiation therapy.

Knowing the dose of radiation delivered to the skin of the patient is not sufficient; one should know also the dose of radiation reaching a tumor below the surface of the skin.

To know the dose of radiation to the skin, and to the tumor, and to be able to deliver the desired dosage to various depths below the surface of the skin, one must know and make use of physical laws and apparatus. These physical laws and this complicated physical apparatus can be handled only by one familiar with the physical sciences, including the laws of x-rays, radium, light, electricity and matter. The term "physicist" is usually applied to one having specialized in the physical sciences.

The first problem to confront a physicist in any roentgen ray installation is to measure the intensity output of the equipment and compare it to the intensity obtained from a known quantity of radium. It often happens that a certain roentgen ray installation will deliver less radiation, operating under certain given conditions, than the average installation operating under the same conditions. In making standardization measurements, the writer has found the intensity of roentgen ray installations to vary from 60 per cent to 100 per cent of the normal or average intensity. These roentgen ray machines can, as a rule, be made to develop the normal intensity by the physicist cooperating with the engineers making the installation. This requires intensity measurements before and after changes are made, to determine whether there has been an increase or decrease in the output of radiation intensity.

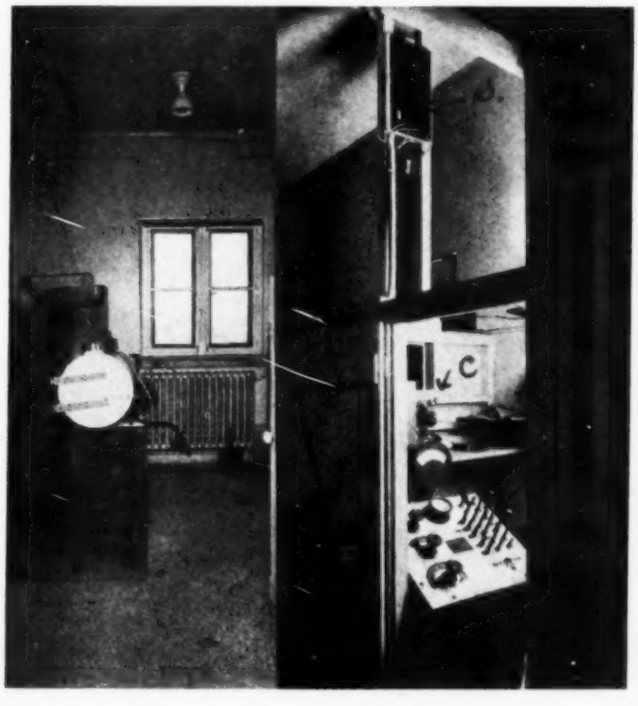


Fig. 1. A. Ionization chamber between patient and x-ray tube; B. galvanometer; C. scale in plain view of the operator.

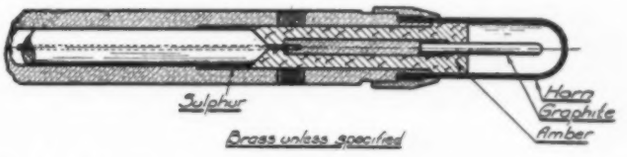


Fig. 2. (1) *Horn ionization chamber for measuring x-ray intensity in water.* (2) *Graphite electrode connected to an electroscope.*

It is obvious that the roentgen ray equipment delivering a low percentage of radiation intensity could never be brought to its highest efficiency without making standardization measurements. The continued use of such an equipment delivering a low intensity output means that the roentgenologists go on treating patients in the mistaken belief that they are receiving normal radiation.

Restandardize Machines Yearly

It is necessary to have roentgen ray machines restandardized at least once a year. If at any time there should be a breakdown involving a change of the constants of the x-ray machine, standardization measurements should be made to ascertain whether the x-ray machine has been brought back to its efficiency output. Good manufacturing plants check and recheck the output of their machinery, because they have found this practice to pay in the form of larger dividends. An inefficient machine in a manufacturing plant may mean only the loss of raw material, while an x-ray machine giving an inefficient output of radiation to a human being may mean loss of life. Most roentgen ray machines are operated quite continuously six days a week, which means that the working parts wear out. The synchronous motor drives the rectifying switches to change over the high voltage from alternating current to direct current at a speed of 1800 revolutions per minute. If the rectifiers are set on the revolving shaft of the synchronous motor in such a position as to give the highest efficiency output of radiation intensity, a lag of these rectifiers caused by constant wear will mean a decrease in the output of radiation.

When our high voltage installation was made

five years ago, we faced the question of not being able to measure the output of radiation. We were able to measure the input of electrical energy by the readings of the primary voltmeter, milliamperemeter and spark gap, but we had no evidence

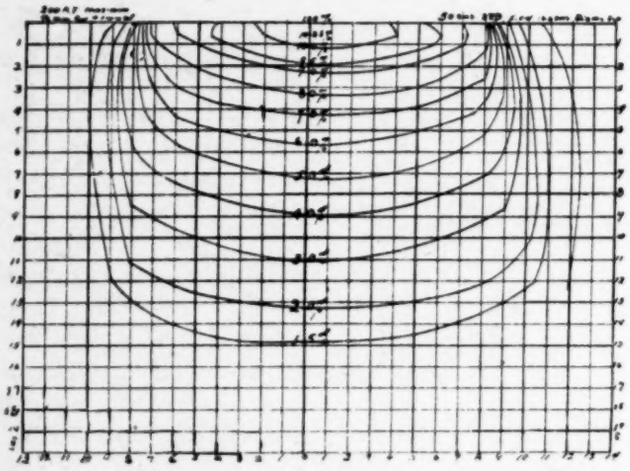


Fig. 3. Curves showing penetration of x-ray intensity into the tissue as compared to the intensity falling on the skin.

of how much of this energy was converted into x-radiation. When we compared the intensity with the intensity from a known amount of radium, which means calibrating the x-ray machine in terms of radium, we knew the output of radiation with a certain electrical energy input; but we were not sure whether this same energy output was being maintained unless we calibrated each day. To calibrate each day required too much time.

We met this break in our line of energy measurements by constructing here in our physical laboratory a device called an "iontoquantimeter" (meaning meter for measuring the ionization current in a gas produced by radiation passing through the gas). This iontoquantimeter functions when x-rays are acting upon it, and the scale reading is proportional to the x-ray intensity. The ionization chamber of the iontoquantimeter is attached to the x-ray tube holder between the filter and the patient, in such a position as to take in the entire field of radiation. The roentgen rays cause a current to flow across the plates of the ionization chamber, through a galvanometer which registers a reading on a scale in front of the operator, as seen in Fig. 1. The flow of current across the ionization chamber is proportional to the change in the radiation intensity. The scale can be calibrated in terms of intensity and readings obtained for the maximum output of radiation. A reduction of the scale reading for any given intensity is a warning signal for the roentgenologist to check up on his roentgen ray equipment.

When a Filter Is Omitted

Has your roentgenologist a safeguard on his x-ray machine against the omission of a filter? The iontoquantimeter also solves this problem. The indicator of the iontoquantimeter registers a given reading as the measurement of the x-ray intensity, after passing through one-half a millimeter of copper, and without the filter the reading of the iontoquantimeter will be about five times as great, showing that there is about five times more intensity reaching the ionization chamber. The operator notices the large increase in the measurement of the radiation intensity and knows at once that the filter has been accidentally omitted. The operator, unless he is blind, will not fail to observe the large increase in intensity output of radiation as shown by the iontoquantimeter, and will immediately stop his x-ray machine. The recognition of the omission of a filter is observed before the x-ray machine is up to full voltage and it is therefore possible to save the patient from the serious dangers of over-radiation.

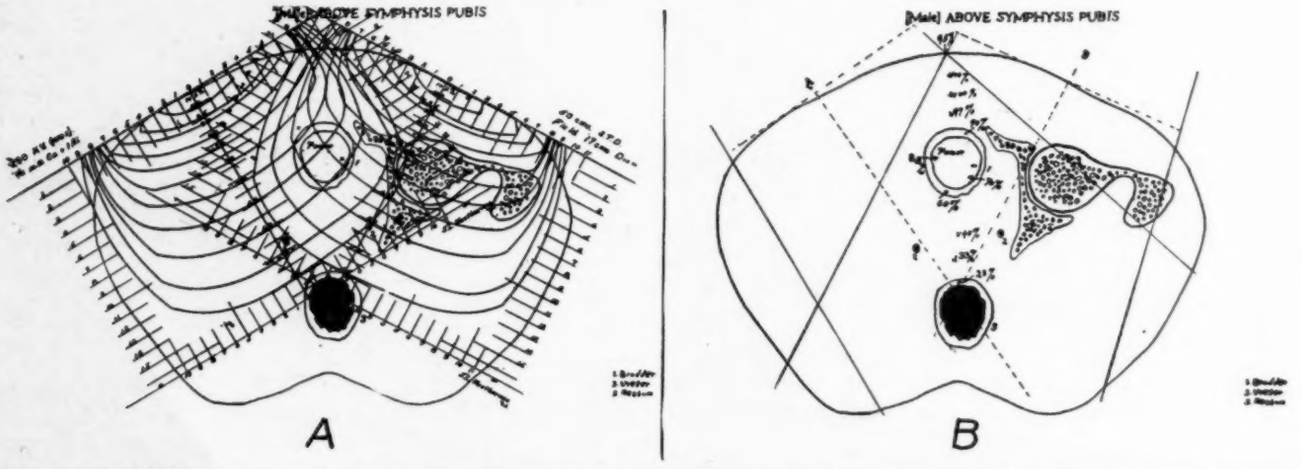


Fig. 4. Anatomical cross section charts drawn to size of patient and location of tumor. A. Arrangements of penetration curves to determine direction for cross-firing. B. Size and direction of fields and the percentage of radiation reaching the tumor.

No roentgenologist becomes immune to such accidents and if the patient is allowed to receive full treatment by radiation not filtered by one-half a millimeter of copper, the result is sure to be disastrous to the patient. It is the business of every hospital to throw around its x-ray department every safeguard that is humanly possible. One mistake may haunt the hospital and the roentgenologist in various ways and for a long time.

It is necessary to know not only the amount of radiation falling on the skin; the roentgenologist must also know accurately how much radiation is reaching a tumor beneath the skin if he is to do intelligent radiation therapy. Some of the factors controlling the penetration of radiation are the loss of radiation passing into the patient, caused by the spreading out in space in all directions from the target of the x-ray tube, which is similar to the reduction of light intensity as one moves away from an electric light; the loss due to the absorption of the tissue as the rays pass into the patient; and, on the other hand, the increase of radiation due to scattering of roentgen rays which depends on so many different factors that it is necessary to measure the intensity reaching any point below the surface of the skin in order to know the dosage at that particular point.

Estimating Amount of Radiation

The amount of radiation reaching various depths in the tissue can be compared with the intensity falling at various points below the surface of a body of water. A small horn ionization chamber, Fig. 2, (made from a cow's horn) is constructed in a form that will enable us to move it about in water and explore the field in the cone of radiation, to determine the quantity of radiation reaching any point in the water. Knowing the intensity of radiation falling on the skin, or surface of the water, we can find the percentage of radiation intensity reaching any depth in the water, hence the same percentage will reach any depth in the tissue. The horn ionization chamber and water are both analogous to tissue in their reaction to penetrating roentgen rays. Fig. 3 shows one of a set of percentage curves of radiation measured in water, operating the roentgen ray machine under given conditions with a given field. The skin dosage or intensity is represented as 100 per cent and the quantity reaching various parts of the tumor can be determined in terms of the skin intensity.

To utilize these depth penetration curves in treating patients, it is obvious that the clinician examining the patient should locate the area to be treated to the best of his ability, in three dimensions. The center of the growth is located on the skin. The next step is to measure with a pair of calipers the antero-posterior and lateral dimensions of a cross section through the center of the tumor, as marked on the skin. A series of anatomical charts of the average male and female have been previously reproduced on lantern slides. The anatomical chart showing the cross section passing through the center of the tumor is placed in a projection apparatus.

What Is Cross-Firing?

The image of the slide showing the tumor cross section is enlarged to the antero-posterior and lateral dimensions of the patient to be treated, and a rough drawing made showing the location of the area. These intensity penetration curves, having been previously reproduced on thin transparent celluloid in three different colors, such as red, black and yellow, are placed over the drawing of the cross section of the patient to be treated. If the tumor lies ten centimeters (four inches) below the surface of the skin, the set of intensity penetration curves will show only about 35 per cent reaching the tumor. It is obvious that if it is desired that more radiation shall reach the tumor, it is necessary to treat the patient through more than one spot on the skin. causing the radiation in certain portions of the cone of radiation to intersect or overlap the previous field. The process is called cross-firing.

Since x-rays travel in straight lines, similar to light rays, the direction of a line through the center of two or more fields is made to intersect near and in line with the tumor, care being taken not to overlap fields of radiation on the skin. By the use of these curves, as is shown in Fig. 4, cross-firing can be accomplished with a rather high degree of accuracy.

This anatomical cross section chart showing the arrangement of fields of radiation for each patient and the amount of radiation placed into the tumor, is a valuable picture of the treatment of each and every patient. These pictures of cross-sectional areas should be filed for future reference to be brought out when the roentgenologist makes his general check-up of results. The charts showing treatment of similar locations and types of malignancies, such as cancer, are compared, to determine if possible why one patient showed more improvement than another receiving similar treatment. If the charts show that each patient received the same quantity of radiation to the skin and each patient received approximately the same quantity of radiation into the malignancy, and the end results are at vari-

ance, then the roentgenologist must look for other factors. If the roentgenologist has used the guess method of thinking that he is delivering any known percentage at a given depth below the surface of the skin, he cannot say definitely that the quantity of radiation has been the same in any two cases. Furthermore, if no record is kept in the form of a chart showing the size of the patient, the fields of radiation, the direction and penetration in the tissue, there can be no intelligent study of results.

If a hospital is to use radium emanation, it is necessary to have a physicist directing the routine work. The cost of employing a physicist can be met in a large degree by the difference in the cost of insurance for radium locked in a safe, from which radium emanation is collected, and the cost of insurance of radium salt that is directly applied to patients.

The physicist can further cooperate with the clinician in various fields of research and can carry on rather extensive research in his own field, which will have a direct bearing on radiation therapy.

Hospitals that do not maintain a physical department should arrange to have the cooperation of a physicist. This question is being solved at the present time in Philadelphia, where the writer has organized and is directing these scientific methods of giving radiation therapy in a group of hospitals. We are keeping complete diagrams and records, which will enable us at various times intelligently to discuss the different techniques in our roentgen ray society. It does not necessarily follow that the application of the physical laws means that one standard technique is to be used, but it does mean that the physicist will be able to develop one technique in terms of another, and it is hoped that in time some standard technique will grow out of all this work.

Physics Teacher Can Direct Work

A hospital situated at a distance from a physical department working in radiation therapy can carry on the same scientific work. It can have an experienced physicist standardize its x-ray equipment, install a continuous reading iontoquantimeter for measuring the x-ray intensity while treating patients, and organize the work of getting anatomical cross section charts showing depth penetration of radiation. The direction of this work can well be left to a high school physics teacher, who, I am sure, would welcome such cooperation.

The writer believes that it will pay a hospital to equip its radiation therapy department to do scientific work. By such an arrangement the patients will receive better radiation therapy and the patients and the roentgenologist will be protected against accidents. There will also develop a greater confidence in radiation therapy when it is known that carefully measured dosages of radiation are given to patients, with safeguards against over-radiation.

Conclusions

Every hospital using radiation therapy should have a physicist, experienced in the use of radiation, to standardize its x-ray equipment.

The x-ray machine should be equipped with a continuous reading iontoquantimeter, to protect the roentgenologist, the patients and the hospital.

An experienced physicist should organize the use of physical measurements in arriving at an intelligent depth dosage, as a routine for every patient.

All hospitals can have the cooperation of a scientist in making use of physical measurements pertaining to the treatment of patients, by arranging with some high school physics teacher to cooperate with their roentgenologist.

LOST RADIUM IS RECOVERED FROM RUBBISH HEAP

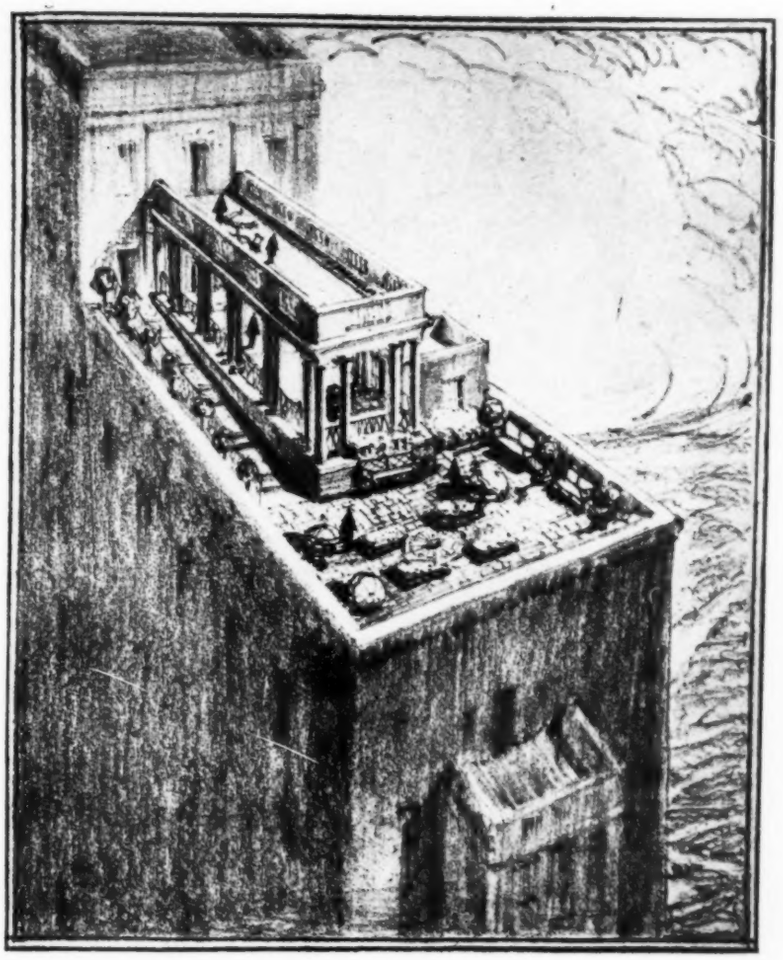
A recent issue of the *Journal of the American Medical Association* gives the following account of a radium hunt:

"Radium valued at $7,500, which disappeared from the operating theater at Charing Cross Hospital, London, England, has been found in a rubbish heap at Harrow after a search lasting several days. Before reaching Harrow the radium had passed through the destructor fires at the hospital. It was removed from a heap of clinkers by the use of a detector machine, and is said to be none the worse for its adventure. The radium, which, apart from its cost, would be very difficult to replace, had been used in the operating theater, and was kept in two tubes. When the operation was completed the theater was cleansed, but the radium was missing.

"The hospital was searched and the police authorities informed. Later, a private inquiry agent was called in. He instituted another search of the building and had the dustbins turned out. He learned that rubbish from the operating theater was burned in the destructor fires at the hospital, and that the refuse was carted away to a dump at Harrow. The assistance of a radium expert from Middlesex Hospital, London, was sought. The expert and the inquiry agent went to Harrow. The dump and the carts carrying refuse from the hospital were searched with the help of a detector machine, and eventually the radium was recovered. It was found that only a small quantity was lost."

WHAT STATE HOSPITAL PATIENTS PAY

Of the 40,281 patients resident in state hospitals last year, more than 85 per cent were free cases. About 13 per cent paid less than $7 a week and only 1.4 per cent paid more than $7.—*Better Times.*



MONTEFIORE HOSPITAL EMBODIES STRIKING STRUCTURAL FEATURES

By

Carl A. Erikson, Schmidt, Garden & Erikson, Architects, Chicago, and S. S. Goldwater, M.D., Consultant, New York

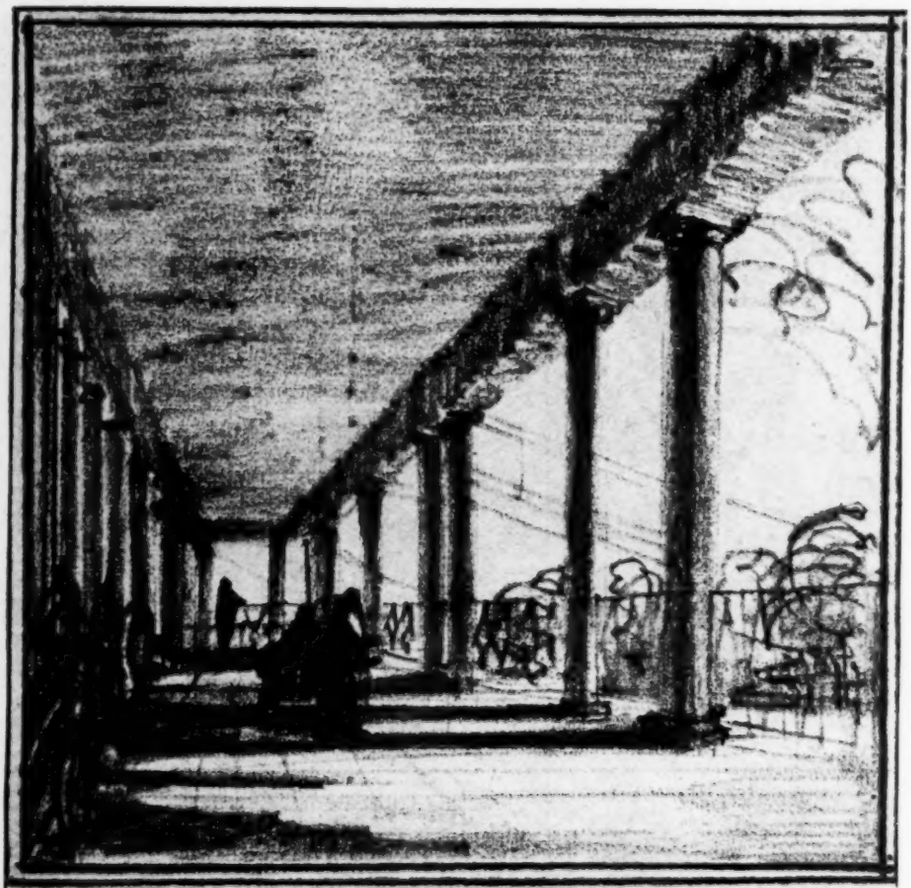
TO THE uninitiated the planning of a hospital appears a simple task, especially for the experienced. All that seems to be required is the repetition of familiar motions. Those who actually plan a series of hospitals, however, know that such an assumption is far from the truth. In a country like the United States, where building is incessant and where many minds are constantly studying the same problems, changes occur even in basic principles. Quite apart from such changes each project presents its own problems, requiring a special adaptation of principles that are widely accepted.

The Montefiore Hospital, Pittsburgh, Pa., presents a picture different from that of any hospital in the planning of which the present writers have participated. Influencing the results were (1) the hospital program, fixing the number and classification of beds, the size and character of the out-patient department and the type of scientific service; (2) the site; (3) the prospect of future growth.

The site offered was a typical Pittsburgh hillside. Along its front ran Fifth Avenue, one of the main thoroughfares of Pittsburgh, a noisy street, carrying heavy automobile traffic and a tramway. At the rear was a plateau, more than 60 feet above the level of Fifth Avenue. It was desired to use the site to the best possible advantage, making it as convenient as possible both to dispensary patients and to those arriving in automobiles, chiefly the staff, private patients and friends of private patients. An effort was made to preserve for in-patients the advantages of the higher levels, by keeping the patients' rooms well back from the noisy street and well above it. To have accomplished this alone would have been relatively simple, but the obvious necessity of providing the easiest access for the out-patients seemed to forbid placing the buildings on the hillside, if the comfort of the numerous visitors to the dispensary was to be considered. A dispensary on Fifth Avenue and a hospital on the plateau seemed to be the proper arrangement, provided the services, such as the x-ray department and laboratories upon which both were dependent, could be placed between them.

It was soon made clear that the hospital could not at the outset build a large nurses' home, and as there were several substantial dwellings on the lot, it was decided to use these at first for the accommodation of nurses.

The high plateau was the most attractive part of the lot, and the scheme for present and future



VIEW OUT UNDER COVERED PROMENADE

construction shows a garden plot on the crest of the hill, surrounded on two sides by hospital buildings and on the third by the nurses' home.

On the side toward Fifth Avenue and parallel to it, approximately 200 feet back from the street, the initial hospital buildings were placed. These may be divided into three parts. The first of these is the seven-story and basement patients' building, approximately 300 feet long and about 200 feet from Fifth Avenue and parallel with it. The second is a medical service building at right angles to Fifth Avenue and to the patients' building; this varies in height from two to six floors, on account of the grades of the hillside. To one side and at the end of the patients' building is the power house and laundry.

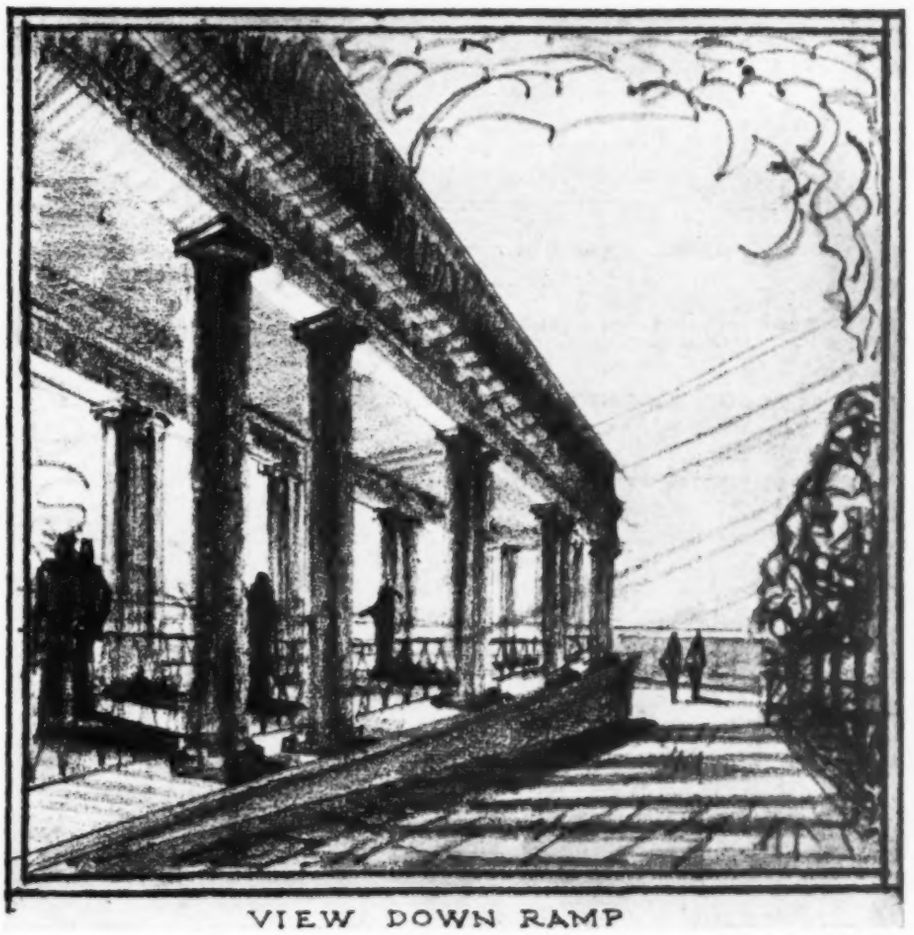
But Fifth Avenue frontage is now valuable. Its probable future value would seem to be far greater. The Fifth Avenue frontage with its noise and dirt would become less desirable for hospital purposes in almost the same ratio that it increased in value for commercial purposes. All of this frontage except that occupied by the dispensary has therefore been reserved for commercial purposes. Whether this will be by the hospital, or by others under careful restriction laid down by the hospital, is an interesting academic discussion but of little real value now. Under suitable restrictions buildings on Fifth Avenue would be of decided advantage to the hospital in cloistering the patients' building from the heavy traffic of Fifth Avenue. Such buildings could be six stories high before they reached the level of the first patients' floor of the hospital, or interfered seriously with the view from these rooms.

The location chosen for the main building is not a level piece of ground but a sharply sloping hillside. As the long axis of the building runs parallel with the falling contours of the lot, one story more is exposed facing the street than at the rear, and in order to facilitate automobile approach from the low level of Fifth Avenue, it was decided to utilize the lower of the two available levels for the main entrance to the hospital, and to place the service level in the rear, one story higher. This accounts for an element in the plan that is unusual, namely, the placing of the main entrance of the administration offices on a level below the floor occupied by the kitchen and the various domestic services.

Viewed from Fifth Avenue, the administration floor is a ground floor, approximately 40 feet above the street, reached by easy roadways. It is fully exposed to the street side, but is either shut in by the mounting hill or lighted by means of areas, at the back. The kitchen occupies a well lighted floor, slightly more than 50 feet above the level of Fifth Avenue. It has a level service entrance, approached from the side street.

Farther down toward Fifth Avenue, only 40 feet back from the street line, is the entrance to the out-patient department, almost on the street level. This lower level is tied to the higher levels of the hospital proper by a composite medical service building, the lower part of which is occupied by the out-patient department and its various subdivisions, the middle section by laboratories, the x-ray department, and other departments, and the upper story by the operating rooms. Not until the operating room floor has been passed does one come to the first floor of the main building which is occupied by patients. This is the ward floor, level with the roof of the medical

service building on top of which is a solarium for the use of ward patients. On the first floor of the medical service building is the entrance to the out-patient department. The entrance lobby or waiting room runs through two stories. Within the outer waiting room is an inner waiting room, on one side of which appears the registration office, on the other a waiting alcove adjoining the pharmacy dispensing counter, close to which is an exit leading to the street. Two clinical groups are accommodated on this floor—pediatrics on one side, medicine and its branches on the other. There is an interior waiting and history room for each department, and on either side of this, in each department, individual examining rooms.



VIEW DOWN RAMP

The application counter and registration office are so arranged as to afford a measure of privacy for history taking. Communicating with the registration office are the social service office and the office of the dispensary administrator. Close by is a locker and wash room for the visiting staff. Connected with the dispensing pharmacy are the pharmacy workroom and pharmacy storeroom. The pharmacy faces the dispensary proper on one side, and on the other side an interior space for the loading of carts for distribution to the hospital.

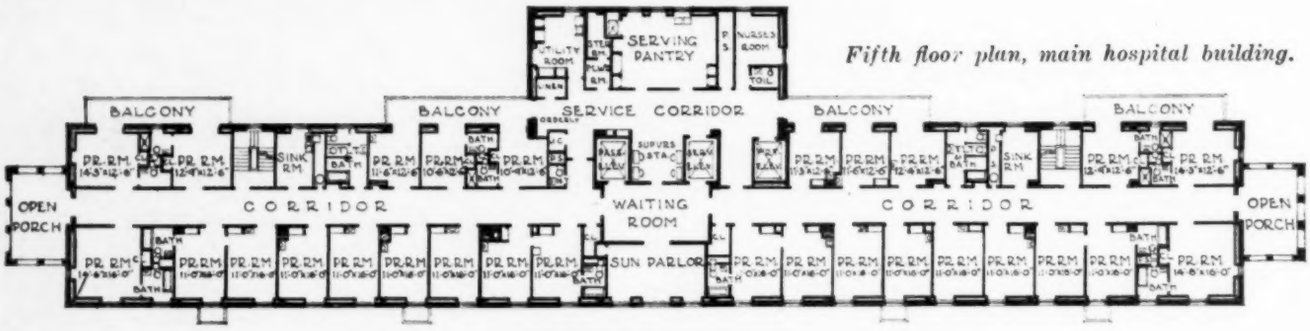
On the second floor of the out-patient department, the right and left wings, corresponding to the space occupied on the first floor by pediatrics and medicine, are assigned respectively to the eye, ear, nose and throat department and to surgery. In the eye, ear, nose and throat department are a waiting room, an ear, nose, and throat treatment room, two dark rooms, an eye treatment and refraction room, a minor operating room, a hearing test room and a waiting and history room. For surgery there are men's and women's treatment rooms with multiple treatment units for superficial dressings and arm and leg cases, a sterilizing room, two smaller examining and treatment rooms for special cases and a minor operating room.

In the rear of this floor one whole side is devoted to genito-urinary and salvarsan work. An interior history corridor is subdivided into two sections, so that the salvarsan and cystoscopic room may be used for female patients, if desired, while the remainder of the division is handling male genito-urinary cases. In this department there is a salvarsan room with three tables separated by hanging curtains, a cystoscopic room with x-ray equipment, a genito-urinary room with individual dressing and examining cubicles, an irrigation room and a small laboratory.

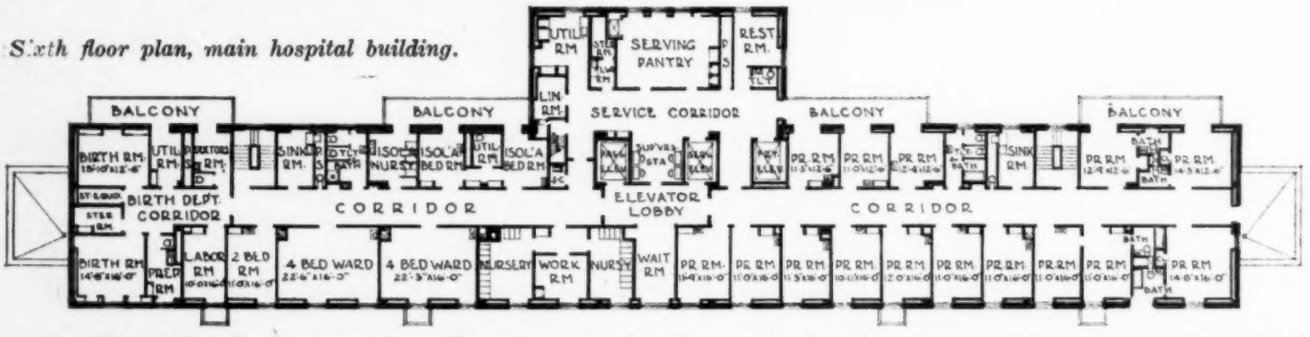
The third floor of the medical service building contains quarters for the resident staff. Eventually this group will probably be provided for elsewhere, thus affording an opportunity for out-patient expansion. On this floor are also a medical library, and a clinical conference room with an examining room and kitchenette adjoining.

The fourth floor of the medical service building is the headquarters for physiotherapy. Here are found the department of roentgenology with its diagnostic and treatment rooms, dentistry, thermotherapy, electrotherapy, massage room and cardiography.

The fifth floor of the medical service building contains a well developed pathological laboratory. At the extreme outer end of the building is a small animal room entered through a fresh air vestibule; adjoining this is an animal operating



Fifth floor plan, main hospital building.



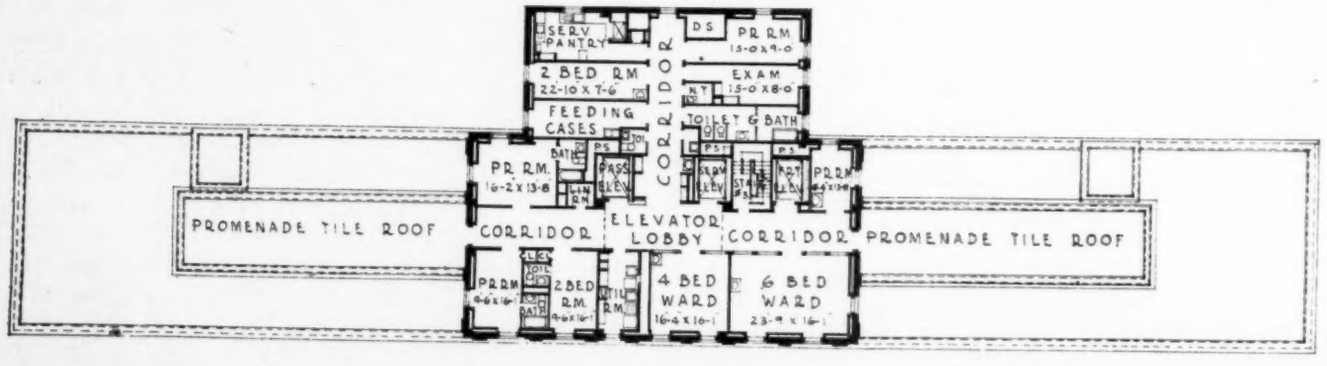
Sixth floor plan, main hospital building.

room. Near the elevator are the office, the record room, and a reception and examining room for ambulatory patients. Chemistry, pathology, and bacteriology are represented by special laboratories. For routine clinical pathology a fourth room is provided. In addition, this floor contains a media room, a metabolism room and a science laboratory for the instruction of nurses.

The operating rooms, which occupy the sixth floor of the medical service building, are six in number. These rooms are arranged in pairs, with connecting sterilizing and scrub rooms. For the central pair of operating rooms permanent viewing galleries are provided. Flush-face or built-in sterilizers are provided. A large workroom for the preparation of dressings is on this floor. The auxiliary rooms include anesthesia rooms, dressing and toilet rooms for the attending staff and house staff, an office and record room, a small local tissue laboratory, an instrument room, a utility room, an orderlies' room and a visitors' waiting or conference room, just outside the main operating corridor.

The first floor of the main hospital building is

Seventh floor plan.



EIGHTH FLOOR PLAN

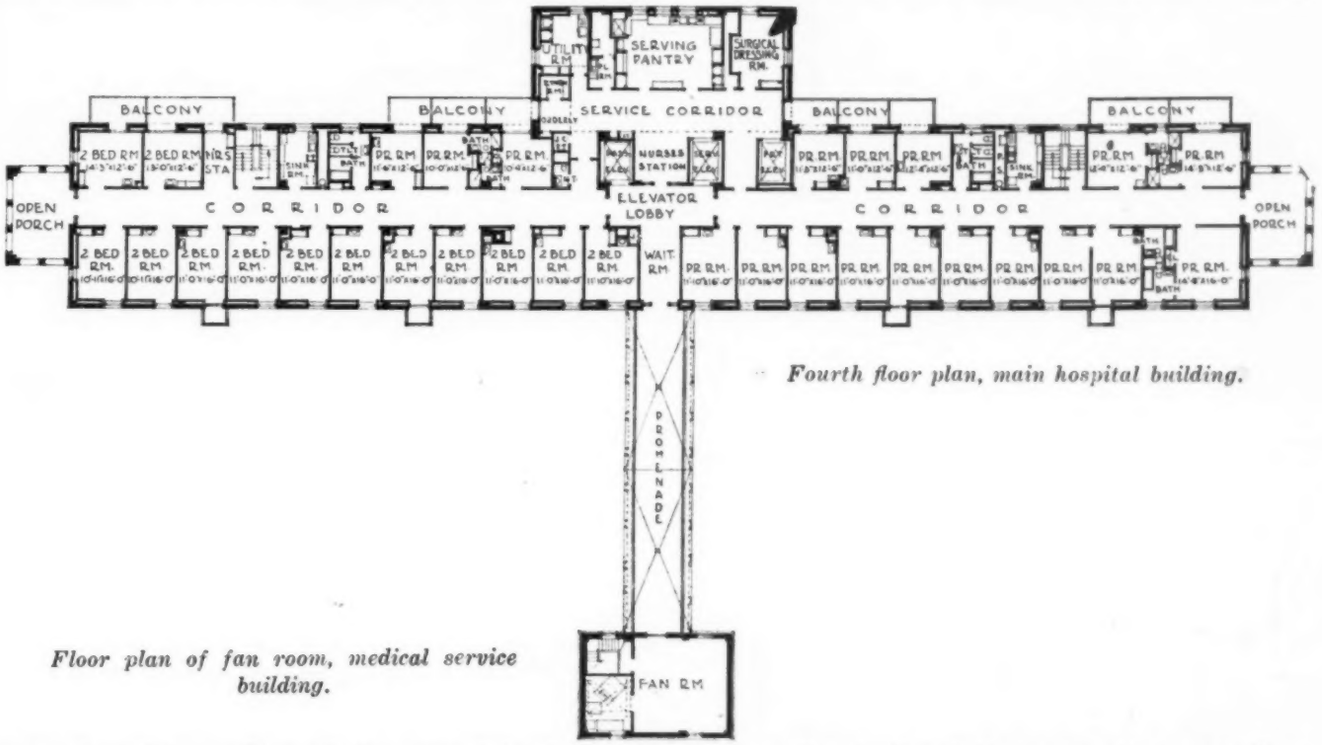
level with the laboratory or fifth floor of the medical service building. The entrance lobby is 24x48 feet. Opening on the lobby are a reception room, a board room, public telephone booths, passenger elevators, an information counter, a telephone central. Those are so arranged that a telephone operator can control the lobby at night.

The general administrative offices, ranged along one side of the lobby, include main office, cashier's office, auditor's office, social service department, superintendent's office and staff room. Nearby are the record room and the record storeroom. At the end of the corridor is a residential suite for the superintendent. On the opposite side of the lobby the central corridor affords access to the nurses' registry, office of the superintendent of nurses, special nurses' locker and rest room and nurses' demonstration and classroom. The part of this floor that for the time being will be used for teaching will eventually become available for the expanded administration of the hospital, upon the construction of the proposed school of nursing. The laundry, on this level but separated from the office section, is entirely above ground, and is ventilated on three sides. It is approached from the floor below by means of a special elevator and stairway.

The ground or basement floor of the main hospital building has a full exposure on one side but the opposite side is shut in by the rising hillside. On this floor, directly beneath the laundry, is the engine room, and adjoining it the boiler room with an enclosed power house yard. Adjoining the engine room are the engineers' supply room, engineers' toilet, switchboard room, and workshop. Nearby are a series of storerooms, soiled linen rooms (bottom of clothes chute), rug and carpet cleaning room, gauze reclaiming room, linen room, sewing room and mattress and clothes sterilizing room. The basement, to the right of the service building, houses a small self-contained isolation ward, and the admitting department of the hospital, including the ambulance entrance, emergency examining and treatment room and several two-bed wards for newly admitted cases, with complete ward utilities. A room for the storage of ward patients' clothes is included in this division.

The second floor of the main hospital building, corresponding to the sixth or operating room floor of the medical service building, is the kitchen and dining room floor. The main kitchen and its accessories occupy an extension from the stem of the main building, approximately 42 feet deep by 74 feet wide. The goods receiving platform and receiving lobby are near by, and the kitchen equipment has been logically arranged for the receipt of supplies, their temporary storage, their preparation, cooking, subdivision and distribution.

It is the plan of the hospital administration to prepare trays for private patients in the main kitchen. The central tray loading space is surrounded on three sides by a cold service room and counter, a hot service counter and the service counter of the special diet kitchen. While the present intention is to prepare trays for private patients in the main kitchen, the several serving pantries have been so arranged that it will be



Fourth floor plan, main hospital building.

Floor plan of fan room, medical service building.

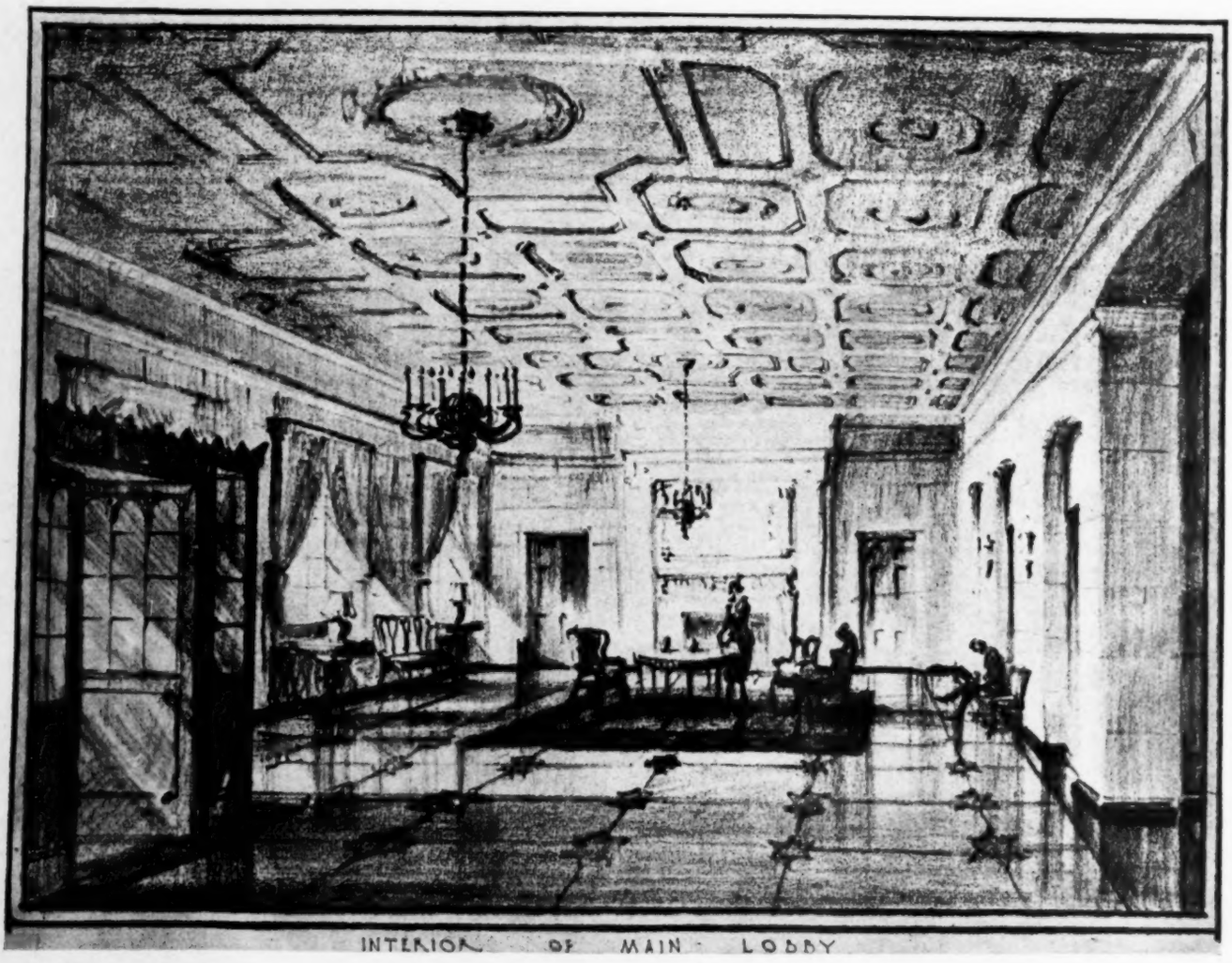
possible to shift tray preparation to individual floors whenever this may be desired. In addition to the regular kitchen service, provision has been made for a bakery and for two small special meat and milk kitchens where the Jewish dietary laws can be observed. The grocery and kitchen storerooms are on this floor, in convenient proximity to the goods receiving station and the kitchen.

The stem of the main building, to the left of the medical service building, shelters the nurses' dietetic laboratory, dietitian's office and the principal dining rooms. At the opposite end of the building are dining rooms for male and female help, with a separate cafeteria serving room. Locker and toilet rooms for male and female help are not far from the service entrance. At the extreme end of the building are the autopsy room and morgue, with a waiting room and exit to the service yard.

The permanent accommodation of patients begins on the third floor. Out of fifty-two beds which this floor accommodates, twenty-four occupy six four-bed wards, twenty occupy ten two-bed rooms, and eight are in single or isolation rooms. There are open porches at the two extremities of the building, besides a number of small balconies. The passenger elevator opens into a central elevator lobby, 10 feet wide by 24 feet long. Adjoining this are a visitors' waiting room and day rooms for male and female patients, respectively. The day rooms communicate not only with the central lobby but with the wards and corridors. Each wing of the building has its own nurses' station strategically located, sink room and patients' toilets and bath.

Common to the floor is a service group built over the kitchen extension at the rear of the main building. Here, opening off a broad service corridor with which the service and freight lifts directly communicate, are the central serving pantry for the floor, flower room, linen room, utility room and surgical dressing room. The supervisor's station, which is centrally located, communicates directly with the service corridor and controls the elevator or visitors' lobby.

The service features of the fourth floor are essentially like those of the third floor, except that a special nurses' rest room on this floor takes the place of the surgical dressing room below. Distinguishing features of the plan are the separate service corridor, designed to promote nursing



INTERIOR OF MAIN LOBBY

General view of Montefiore Hospital, Pittsburgh.

convenience and to separate noisy services from the patients' rooms, the central location of the supervising nurses' station controlling the elevator lobby and the central waiting room for visitors.

This floor is arranged for both private and semi-private service. The rooms on the Fifth Avenue side of the building are approximately 11x16 feet, less the width of the built-in closets. All rooms are provided with running water, and the rooms on this side of the house are large enough to contain two beds if necessary. The largest and most expensive room is 14 feet 8 inches by 16 feet. It will be noted that the rooms on the street side are all deeper than those on the opposite side of the building. Variations in the size and position of rooms will facilitate price grading. There are at least some of the "small, cheap private rooms" for which the whole country is clamoring.

The fifth floor resembles the fourth in its general character, except that it is designed entirely for private patients and contains a larger number of private baths and toilets and a more spacious sun parlor. Fourteen of the rooms on this floor have private balconies.

The sixth floor is allotted to the maternity service and will accommodate private and semi-private patients. The central nursery is subdivided into two sections, and for better temperature control is entered through a vestibule. In addition there is an isolation nursery divided into individual cubicles for sick infants. The largest wards contain four beds each, and are 16 feet wide by 22 feet 6 inches long. For septic cases two isolation rooms are provided, with an individual utility room. The birth department, which has been carefully insulated, is at one end of the obstetrical floor. It includes two birth rooms, sterilizing room, preparation room with slab bath and toilet, labor room (available as an emergency birth room, if desired), obstetricians' rest and dressing room and utility room.

The seventh or roof floor contains the central solarium, 24x74 feet, and a large kindergarten, 20x54 feet. Sheltered promenades extending to the right and left of the solarium are raised several feet above the roof floor, affording from the promenade an unobstructed view over the parapet. Long ramps of easy grade connect the solarium or promenade roof level with open roof spaces at the ordinary roof level. The solarium has a connecting kitchenette, toilets for men and women and store closets for roof furniture. Closets for toys adjoin the kindergarten.

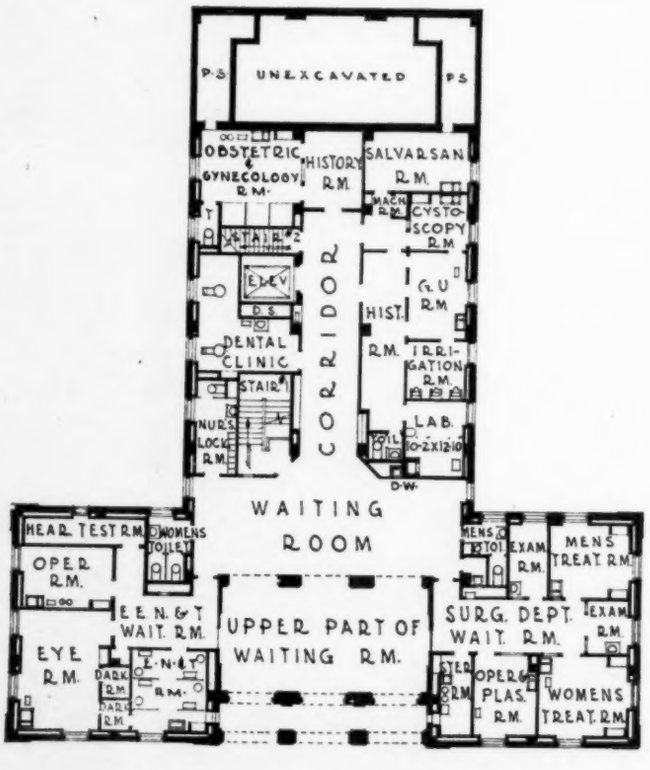
The program called for a children's service of modest size. General principles demanded that the children's service be placed in a location as remote as possible from the adult service and in a terminal section that could be easily quarantined. The choice lay between the end of a floor used in part for other purposes, and an upper story of reduced size, corresponding to the needs of the department.

On the main roof are a solarium, a kindergarten and open spaces, both covered and uncovered. Above the main roof is a second roof story, the enclosed part of which provides for the children's service proper, while the roof of the pergola, rising above the main roof, affords outdoor space for the exclusive use of the children, making it possible for them to enjoy a maximum of fresh air.

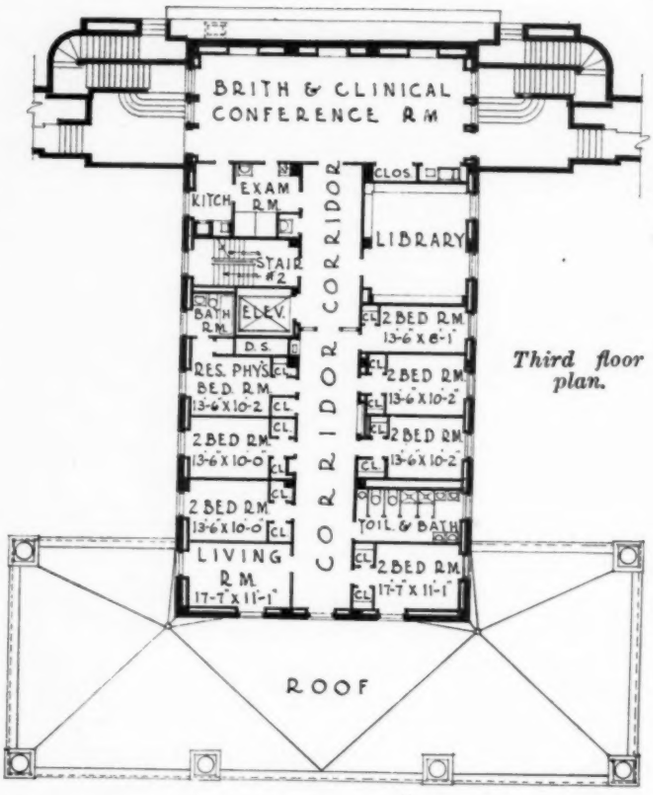
Accommodates Twenty Children

This delightfully located children's department occupies the eighth floor, which is really an upper roof level. It accommodates twenty children. The largest ward contains six beds. There are several single and double rooms, some with private baths, and a four-bed cubicle ward for infants. Open promenades are available for outdoor treatment, recreation and heliotherapy. Complete ward equipment has been provided, including an examining and treatment room, a miniature laboratory and a special room for feeding cases.

The design of such a group as this offers many interesting possibilities and some disquieting problems to the architect. Here is a building that rises twelve full stories above the main street and yet is never more than eight stories above the ground and from the rear is only five stories high. The exterior is a frank expression of the plan as developed to meet the program and the site. If its pedigree must be given it may be traced directly back to the architecture prevalent in England during the reign of the Georges; perhaps its inspiration may be laid more specifically at the feet of those great architects of the early nineteenth century, the Adams Brothers. Not that they ever designed a similar building but much of their work is similar in its restrained lines, in its use of materials and in some of the detail. But the design lays no claim to archeological correctness; the trained eye will instantly detect many variations and a free use of ways and means to obtain the best effects from an architectural standpoint.



SECOND FLOOR PLAN



Third floor plan.

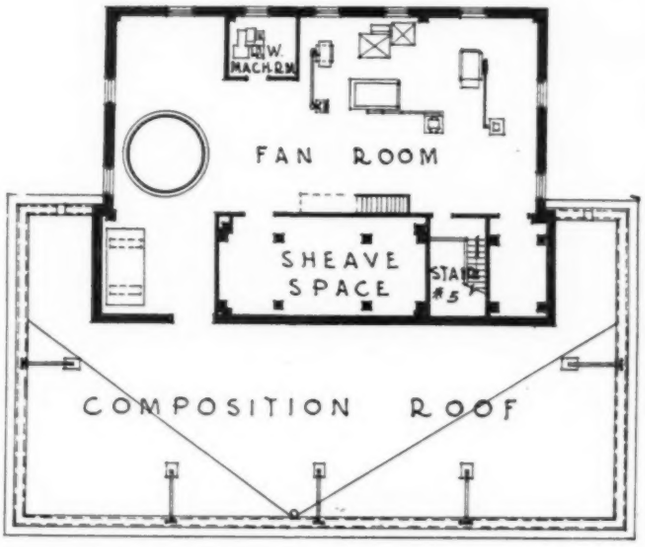
The materials will be of variegated red brick with light joints and buff Bedford stone. Retaining walls of the road, the lower stories of the medical service building and one story of the hospital are of stone; otherwise the body of the building is of brick with stone string courses, cornices and other accenting features.

Much thought was given to the study of the larger masses of the building. The two-story portion of the medical service building was spread out horizontally to form a base for the vertical

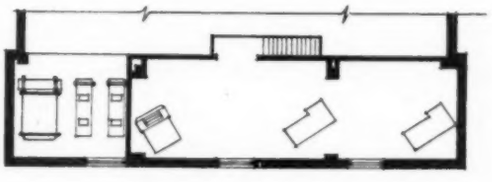
mass of the four stories of building above it, to knit this into the hillside and to echo the larger mass of the main hospital building. The curving roadways to the main entrance, a 7½ per cent grade, with their retaining walls should form an interesting foil for the straight lines of the building. The entrances are accented by enrichment in stone—the dispensary by a loggia, the main entrance by two stone arched automobile drives.

The two-story entrance hall of the out-patients' building and the main lobby are wainscoted practically to the ceiling in Tavernelle marble, with simple plaster motifs in the ceiling. American walnut doors are used here as they are on all private patients' floors.

The committee room and the library are paneled in American walnut and the reception room in



PENT HOUSE FLOOR PLAN



white pine, left in almost its natural state. The Naumburg solarium has a low wood wainscoting and wood trim, and a simple plaster cornice. On the walls above the wainscot it is planned to use decorative landscape wall papers, well varnished and sanitary.

The kindergarten is wainscoted as is the Naumburg solarium, but pictures telling nursery rhymes will be painted on the walls. The floor will be of rubber tile, with conventionalized animal inserts in the field and border.

In all of these rooms, except the kindergarten, the floors are of terrazzo of a color to suit each room. Terazzo is used practically everywhere in the hospital. The corridors have a four-feet strip of rubber tile with terrazzo base and border. The operating and birth rooms have flint tile floors, terrazzo base and border and colored tile wainscoting. The kitchen has a quarry tile floor. The Naumburg roof garden has a floor of random and vari-colored slate. Storerooms and boiler rooms have floors of concrete.

Throughout, including stairs, the base is a coved one, except when concrete floors are used when it is of terrazzo. Liberal use is made of white tile wainscoting which will be found five feet-high, in sink rooms, utility rooms, serving pantries, baths, toilets and other similar places. Colored tile wainscotings, seven feet high, are used in the operating rooms, birth rooms and similar places. Special equipment in some places has necessitated higher wainscotings.

The kitchen, the service corridor on the third floor and the basement corridor of the main hospital building are faced with a "soap shape" vitreous and smooth brick. Its face is standard brick size but it is only one and one-half inches thick as against four inches, which is the size for ordinary brick.

Sound absorption materials are used in all patients' and service corridors, in birth and labor rooms and in a portion of the kitchen. Great care has been taken to isolate noise producing areas, such as the birth department and elevators, against sound transmission.

Door frames will be of steel, flush with the wall. Lavatories in private rooms will have flush tile wainscoting back of them. Cases are of steel and built in. So, too, are the refrigerators.

Exhaust ventilation is provided for all of the odor producing areas, such as kitchens, toilets, utility rooms, sink rooms and laundry.

The construction is fire-resisting and of the highest standards. Because of soil conditions it

BOILER & ENGINE ROOM PLAN

was found necessary to use short caissons for foundations. The skeleton is of reinforced concrete with concrete joists, floors and suspended wire lath and plaster ceilings.

The power house equipment includes two 300 h. p. boilers, equipped with underfeed stokers; one CO_2 refrigerating machine, having a capacity of thirty tons per day, which will cool all refrigerating boxes by using circulating brine, and will cool drinking water for use throughout the hospital. It will have a capacity of freezing 2400 pounds of ice per day.

VIEW FROM SOLARIUM ONTO ROOF GARDEN

There will be a vacuum system of heating. Water softening equipment is being installed, as well as equipment to deaërate all hot water. The garbage incinerator will have a capacity of 400 pounds per hour.

There will be five elevators: two gearless traction in the hospital building, two geared, in the medical service building and one geared, in the power house and laundry.

Parking Cars Is Problem

A problem that every large metropolitan hospital must meet is that of parking cars. It was particularly acute here for not only was parking already prohibited on Fifth Avenue but the side street was quite steep and both streets were much too far away from the main hospital entrance to be convenient, even were they available for parking. By widening the roadway on each side of the main entrance space is provided for parking from 100 to 150 cars.

Construction is now well under way and occupancy is set for April, 1928, when the present Montefiore Hospital will be abandoned.

Basically, of course, the credit for this splendid addition to the Pittsburgh hospitals lies with the Jewish community of Pittsburgh, who though rather limited in number, subscribed over $2,250,000 to the fund which has made the hospital possible. The writers feel that whatever measure of success they have achieved is largely due to the tireless and inspiriting encouragement of Nathaniel Spear, chairman of the building committee. His associates on that important committee have given generously of their wide experience in meeting the many difficult questions that have arisen. Margaret J. Robinson, superintendent of the hospital, and some of the more active staff members should receive credit for the many hours spent on the numerous problems inherent in a project of this magnitude and importance. Henry Hornbostel, the consulting architect, also contributed many suggestions that were of assistance in working out the plans.

WHERE SHOULD HEALTH EXAMINATIONS BE GIVEN?

The following significant statement occurs in a recent report issued by the United Hospital Fund of New York:

"Periodic health examinations, the systematic supervision of the health of children and adults, immunization against certain diseases, and health education have thus far developed almost exclusively through clinics. We may expect that during the next few years either the rank and file of the medical profession will grasp this opportunity, or that, on the other hand, the growing demand of the public for these services will require their further extension in clinics under official or voluntary health organizations.

"It may prove beneficial to rate particular types of clinics in terms of their compliance with a minimum or desirable standard, and out-patient departments as a whole in respect to a few specific and fundamental points, such as the five or six which are recognized in the 'general standards' of the Associated Out-Patient Clinics of New York."

In 434 B. C., when the stadium at Athens, Greece, fell during a performance, and 50,000 people were killed and injured, the women of the city banded together and formed what was probably the first "Red Cross Society" of history. They bound up the wounds of the injured, provided places where the seriously wounded might be treated, and did all in their power to lessen the sufferings incident to this disaster.

SOCIAL SERVICE WORK COMPLETES THE CLINICAL PICTURE*

By Lena R. Waters, Director of Social Service, Hospital of the University of Pennsylvania, Philadelphia

IN DISCUSSING the relation of social service to the hospital some of the questions that should be considered are: What is social service? What is a hospital? Why should they be related?

Present day social service is the outcome of man's instinct to serve, to help those in need of assistance in order that they might no longer need assistance.

This effort to better the condition of those in difficulty, whether that difficulty be mental, moral, financial, physical, or all of them, has been expressed in various forms, ranging from the dole given the beggar to the most refined type of scientific medical service.

In tracing the history of social service one learns that in early days the responsibility for helping those in distress centered chiefly in the church. One reads of the advance from the day when alms were given indiscriminately at the monastery gate, without any concern for the individuals receiving the alms, to the day of St. Francis of Assisi who interested a group of his followers in going with him to live among the poor to serve them personally. Next, we read of St. Vincent de Paul, who organized a group of lay people from the church and called them Sisters of Charity.

In 1536 the first English food law was passed. This transferred the responsibility of the care for the destitute from the church to the state, and service to relieve distress was paid for through taxation. The methods undertaken were not successful, poverty and illness increased and there was great industrial unrest. Therefore the plan was modified and state relief was largely withdrawn, resulting in the organization of many groups of charitable individuals who attempted to relieve distress caused by unemployment, illness, poverty and so on, through private contributions and volunteer services.

The consequent duplication and overlapping led to a central organization to care for the poor. This was called the London Charity Organization Society.

Throughout the years there was an increasing interest in science along all lines shown in the scientific approach to industrial problems and the scientific approach to medicine. This influence appeared, too, in the attitude of those who were concerned with charity, so that we are told by Mary Richmond in "Social Diagnosis" that those interested in the development of the London Charity Organization Society in 1869 "were concerning themselves with efforts to place distressed people above the need of relief and to release their latent possibilities." This was to be accomplished through a study of the causes that might have produced the difficulty, in order that social treatment could be given on the basis of facts.

There have been many theories as to the cause of social maladjustments—heredity, industrial conditions, over-population. But there is an agreement that no one of us is an isolated individual. Each is a member of some group, most often the family group, and our lives are related to and influenced by the other members of our group—our family, our fellow employees, our neighbors, our church fellows. We are influenced by our physical environment, the kind of house

Painting the Background

IN ORDER that the clinical picture of the patient in the hospital bed may be complete, in order that the necessary background may be supplied, the hospital has recruited workers from the field of social work, that field which has educated its workers to study the person in relation to his environment and to diagnose his social condition—workers who have developed a technique and skill in treating social maladjustments.

The hospital has most wisely drawn these valuable assistants into its organization and has established social service as one of its essential services, in order to gather such facts as may be needed to make a proper diagnosis, and to render such social treatment as may be necessary to make the hospital treatment complete and the cure of the patient permanent.

*Read before the meeting of the Hospital Association of Pennsylvania, Philadelphia, 1927.

we live in, the kind of work we do and the hours we labor, the sort of air we breathe and the amount of sunshine we enjoy, our hours of leisure and how we spend them. We know that illness and other social difficulties may be influenced by overwork, unemployment, immorality, low wages, bad heredity, ignorance, illiteracy, unsuitable education, public disaster, character weaknesses, and that all of these are interdependent and interrelated. A person's capacity may be handicapped and bound down by any or all of them and until he is released and his ability set free he is helpless.

Social maladjustments are not confined to the poor. There are undernourished children among the rich, there are family discords and disintegration in all classes, rich or poor; problem boys and girls are found not only in the homes of the poor and illness strikes all of us at some time.

Why Social Work Is Needed

Because it has been realized that there are always causes behind the social difficulty and that the social difficulty cannot be intelligently treated until the contributing causes are discovered, there has developed a new group of professional workers, educated in the theory and skilled in the practice of what is known as social work.

This field has been divided into various specialties—the settlement work concerned with community organization, the recreational field, such movements as the Y. W. C. A. and the Y. M. C. A., the Knights of Columbus, and a large central field which is referred to as the case work field.

Social case workers are employed in industries, in the public schools, in colleges and universities, in courts, in churches, in family societies and child placing agencies and in medical institutions.

The objectives of these case workers are the same whether they labor in the university, the charity society or the medical institution; through a study of the individual in relation to his environment, both mental and physical; to arrive at a social diagnosis; through social treatment based on the findings in the cases. In each instance the aim is to help the individual to realize his highest point of efficient living.

How Treatment Is Planned

As has been stated social difficulties are related, and modern thinkers recognize the importance of this relationship in planning treatment. The courts are no longer judge, lawyer and jailer. They have added to their group as members of the court, the psychologist, the psychiatrist, the social workers. The modern treatment of the criminal is based on a knowledge of the environment that has produced him. In treating the maladjusted university student we must treat him in the light of the knowledge of the mental and physical environment of which he has been a part; in treating the mentally or physically ill person we must treat him with a knowledge of his physical and mental background and the influences that have surrounded him, and the treatment must be based on that knowledge.

Object of Early Hospitals

The history of hospitals also brings to light interesting facts in development. The name is derived from the noun *hospes*, meaning host or guest, and the early hospitals were founded as institutions or hotels for the destitute and the homeless, and for temporary care of the sick and injured, as an expression of the desire and effort to serve one's fellowman. Their object was to treat the "poor, diseased person until he got well" and to prevent the spread of disease by providing an institution or pest house for those with contagious diseases. This spirit of service is the predominating spirit in the present day hospital.

Like social work, these institutions were originally developed in connection with monasteries. Each monastery had its infirmary or room set apart to care for ill persons. Later, separate buildings were erected for the purpose and money was subscribed by benevolent individuals to maintain them. Establishments for the sick poor remained in the hands of the clergy until the time of the Reformation when some of the monasteries and church property were appropriated and set apart for the care of the sick. This was the case with St. Bartholomew's and St. Thomas', London. The conception of the hospital as an institution for the charitable relief of the destitute sick has persisted until within a comparatively late period.

Striking Growth of Hospitals Noted

The changing industrial conditions, resulting in the growth of large cities, the changed mode of living from the house to the small apartment, the great interest in public health and preventive medicine, the development of specialization, modern medical methods requiring elaborate equipment for diagnosis and treatment and the cooperation of various specialties, have meant a tremendous growth in the use of hospitals and dispensaries by all classes, rich and poor. One realizes this great growth when one is told that there were 149 hospitals in 1873 and in 1923, fifty years later, 6,762. The hospital has become an important community agency.

The report of the committee on training of hospital executives of the Rockefeller Foundation,

published in 1922, defines the hospital as "a community organization which provides facilities and personnel for rendering the highest possible grade of health service to patients, professional groups and the community; for educating the community to demand and support adequate health service and sound health policies; for educating additional personnel and professional groups in technical fields and cooperative endeavor; and for advancing our knowledge of disease and its prevention through technical research and appropriate organization. . . . Service to the patient is the major function and includes adequate care and every reasonable attention to his physical and mental comfort. It includes prompt, accurate laboratory, x-ray or other determination, and interpretation of the social, economic, environmental factors that may be contributing to the individual problem. A reasonably accurate diagnosis and logical, skillful treatment should follow an evaluation of the facts and data secured. To render the treatment most effective, a follow-up and after-care function which aims at convalescent care, reëducation and readjustment of physical or mental activities, to secure promptly the highest degree of recovery and economic usefulness, is necessary."

Scope of Hospitals Has Broadened

Hospitals are no longer regarded merely as shelters for the destitute and dying. They are considered organizations for the study, the treatment and the cure of disease; they are reported as centers of health education and preventive health work. They have long ago left behind that day when there were no medical histories, and a large proportion of the beds were built to hold from four to six patients. History tells us of two or three small-pox patients and perhaps four surgical patients in one bed. The mortality figures of those days were appalling and disease was spread in hospitals through lack of ventilation, overcrowding, lack of cleanliness, lack of nourishment and poor administration.

How Medical Practice Has Changed

The present day hospital with its beautiful buildings, its bright sunny wards and cheerful sun parlors with every modern convenience for the comfort and care of patients, its complete equipment for the diagnosis and treatment of disease, and its magnificent organization of the many specialties required in the present day practice of medicine, is an institute of Hope.

Medical practice has undergone marked changes. The day of pills and powders has passed away. Specialization has developed to an almost dangerous degree. Modern methods of scientific investigation and the development of scientific equipment have made diagnosis accurate and sure. But it has largely transferred a considerable part of medical practice from the home to the hospital. Modern methods call for examination and treatment, not by one person but by a group of persons, each contributing his particular skill and knowledge to the problems of the individual patient, so that in the hospital of today we find multiplication of services, the numerous special divisions of medicine, the nurse, the social worker, the dietitian, the optician, the dentist, the pharmacist, the x-ray technician, the laboratory technician, the occupational therapist, the physiotherapist, the clerks, engineers, orderlies—all brought together through expert administration into a smoothly working organization which makes it possible for them to pool their skill and their knowledge, and in this way effect the best possible treatment of the individual patient.

Physician Must Know Patient

Disease cannot be treated apart from the patient, and in order to treat the disease we must treat the patient. In order to treat the patient the physician must know the patient. He must know what manner of man he is, what are his habits of living, what are his interests, what kind of work he does, what exercise he takes, what kind of air he breathes, what are the influences that have surrounded him. As Dr. Francis Peabody, Boston, recently said in a talk to the students of the Harvard Medical School, "Everybody, sick or well, is affected in one way or another, consciously or subconsciously, by the material and spiritual forces that bear on his life, and in the case of the sick such forces may act as powerful stimulants or depressants. . . . What is spoken of as a 'clinical picture' is not just a photograph of a man sick in bed; it is an impressionistic painting of the patient surrounded by his home, his work, his relations, his friends, his joys, sorrows, hopes and fears."

In order that the "clinical picture" may be clear and complete, in order that the necessary background may be supplied to the patient in the hospital bed, the hospital has recruited workers from the field of social work, that field which has educated its workers to study the person in relation to his environment and to diagnose his social condition, workers who have developed a technique and skill in treating social maladjustments. The hospital has drawn these workers into its organization and has established social service as one of its essential services, in order to gather such facts as may be needed to make a proper di-

agnosis, and to render such social treatment as may be necessary to make the hospital treatment complete and the cure as permanent as possible.

As defined in the report on hospital social service made by the American Hospital Association in 1920, the primary duty of social service in a hospital or dispensary is "to assist in the cure and prevention of diseases in individual cases by such activities as:

"1. Discovering and reporting to the physicians facts regarding the patient's personality or environment, which relate to his physical condition.

"2. Overcoming obstacles to successful treatment, such as may exist or arise in his home or his work.

"3. Assisting the physicians by arranging for supplementary care when required.

"4. Educating the patient in regard to his physical condition in order that he may cooperate to the best advantage with the doctor's program for the cure of the illness or the promotion of health."

We see the interrelationship of health and social living, and we have come to realize that social case treatment is dependent in a large degree on medical treatment and that medical treatment is largely dependent on social case treatment. And so the two services are brought together by the hospital to make diagnosis sure and treatment complete. Social service is an integral part of the hospital organization, side by side with the other hospital services. All are under one administration and have one common purpose —to give the highest grade of service to the patient in order to restore him to the fullest possible degree of health, happiness and usefulness.

ALGERIAN INFIRMARIES TO BE IMPROVED

In Algeria there are at present two forms of hospital service: the large civilian hospitals in the cities, and the auxiliary hospitals, or widely scattered infirmaries for the natives.

These infirmaries have rendered great service owing to their proximity to native patients and their low fees. Their equipment, however, has been extremely rudimentary, and recently the natives have preferred going to the civilian hospitals in the cities. The expenses of the latter have been thereby much increased, which has had a disturbing effect on Algeria's general budget.

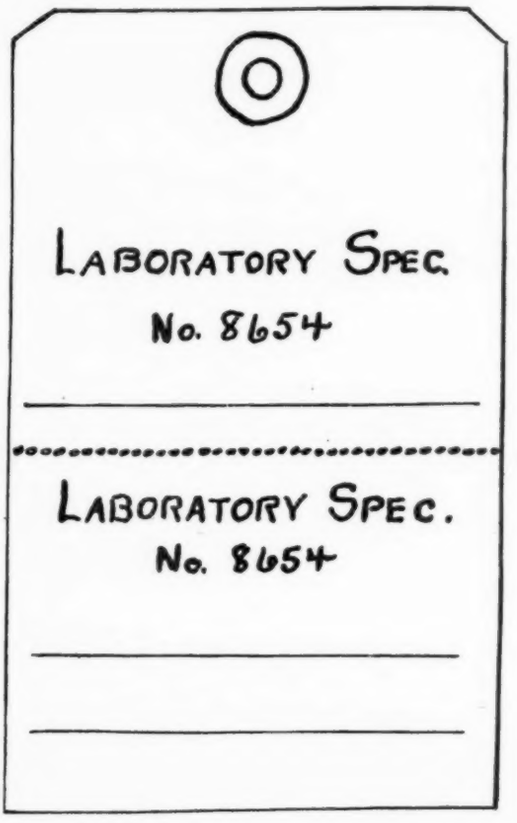
The governor general has inquired into the situation. He has found that the organization of the infirmaries is frequently defective, which may account in part for the disaffection of the natives. The food was mediocre and insufficient, patients were sleeping on dirty straw mats that could not be disinfected, and as the infirmaries came to be abandoned by their clientele, the worse their condition became.

The governor general has decided to grant the infirmaries an increased appropriation in order that they may be better equipped. The daily allowance has been increased to seven francs, and the straw mats will be discarded and army beds substituted. The administrative committees that control these infirmaries must henceforth visit them at least once a week.—*Journal of the American Medical Association.*

HOW TO IDENTIFY LABORATORY SPECIMENS

In spite of rigid rules and constant attention, specimens for the laboratory not infrequently become separated from their history sheets while in transit. This separation results in serious confusion, in delay and occasionally in the complete loss of the specimen, due to rapid deterioration.

Such emergencies can be largely eliminated through the use of a special tag, similar to the accompanying illustration. This tag is perforated through the center, each portion bearing duplicate numbers. With a spring clasp, or



card-holder, the upper portion can be attached to the edge of the specimen dish or bitten into the cork of the bottle. With an ordinary paper clip the bottom end of the tag is attached to the history sheet. Thus regardless of separation each is identified and can be brought together without delay. This system has been found valuable at the Highland Hospital, Rochester, N. Y.

Rome very early recognized the necessity of providing public means for the care of health and the cure of disease. The valetudinaria or infirmaries were supported by taxation and cared for all classes. In addition there were military hospitals for the treatment of sick soldiers. The valetudinaria were so named from Valetudo, the Roman Hygeia which came in with the Æsclopiadæ.

BUILDING AND EQUIPPING FOR THE PATIENT'S BENEFIT

By Warren C. Hill, Kendall, Taylor & Co., Architects, Boston, and Vera A. Allan, R.N., Superintendent, Lynn Hospital, Lynn, Mass.

LYNN Hospital, Lynn, Mass., lies in a large city block not all of which is controlled by the hospital. The longer axis of the hospital is north and south, the newer buildings ranging to the southerly side of the lot or in that general direction.

On the northerly end there were several older wooden buildings, a one-story ward building and a two-story administration building with one-story additions, in which were the operating, accident and out-patient departments, and the pharmacy and laboratory, all connected by means of a wooden corridor.

Main lobby, Lynn Hospital, Lynn, Mass.

This group faced a small park between the hospital and Boston Street and for some years it has been the desire of the direc-

The reception room is simple and attractive and has a real fireplace.

tors to do away with these buildings. This has been made possible through the generosity of the citizens of Lynn.

The problem therefore was to combine all the departments before mentioned into one building erected on the site of the existing wooden buildings, inasmuch as this was the only logical location for the new building, and at the same time maintain the functions of these departments during the construction of the new building.

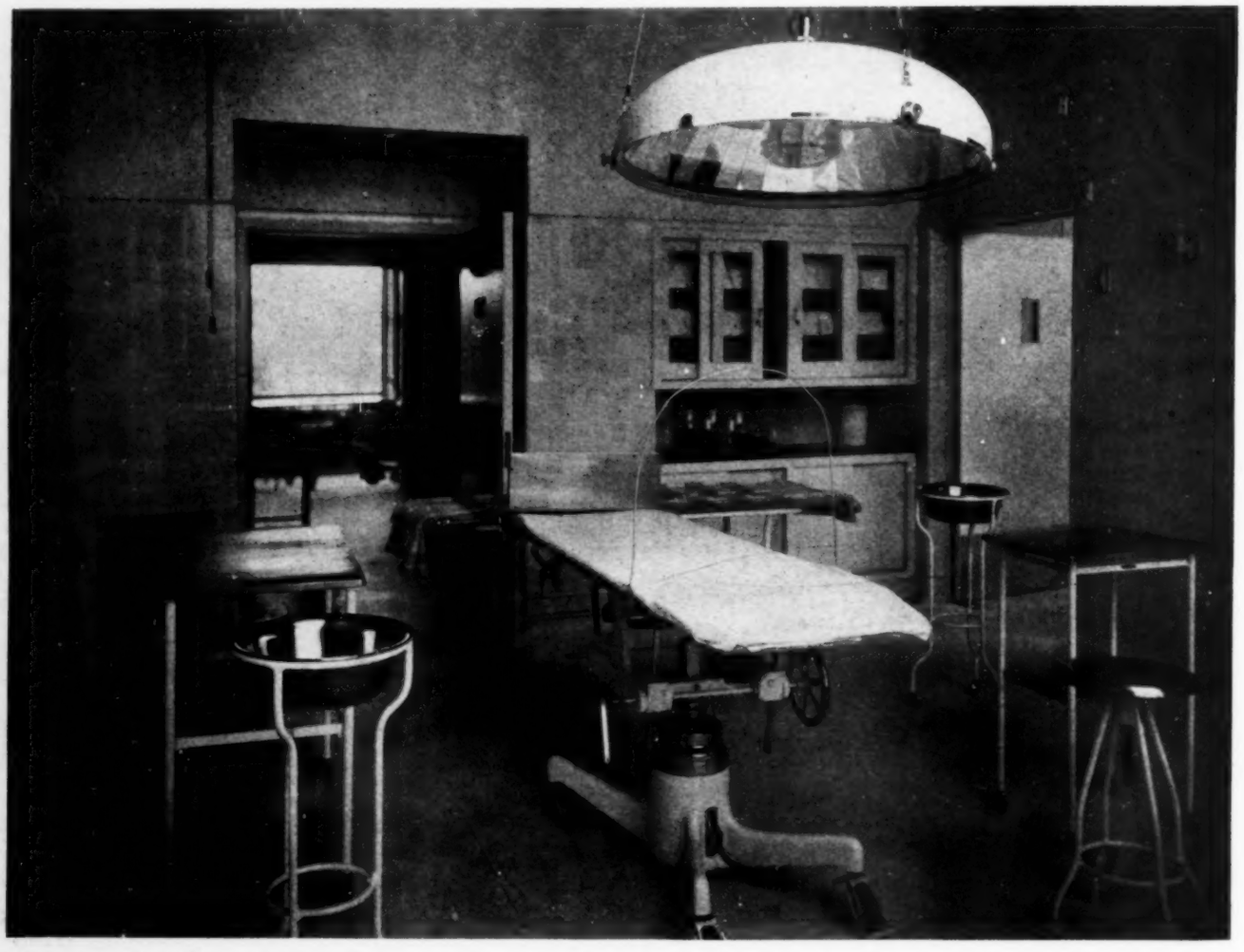
The accompanying plans show how the problem was accomplished. The existing administration building, being of more modern or substantial construction than the others, was moved to an adjoining plot on the west of the new building, where for the present it is occupied by female help, with the exception of the street floor, which has been remodeled for classrooms. It has a temporary corridor connection with the new corridor just north of the one-story ward building, which was not disturbed and will not be disturbed at present.

The grouping of the several departments under one roof called for considerable study, but through the cordial cooperation of the hospital officers, the staff and the architects this was happily accomplished.

The main portion of the building is about 132 feet long on the Boston Street side, and 40 feet wide, exclusive of the projections on the two ends to the south, which some day will be the points of contact for future extensions.

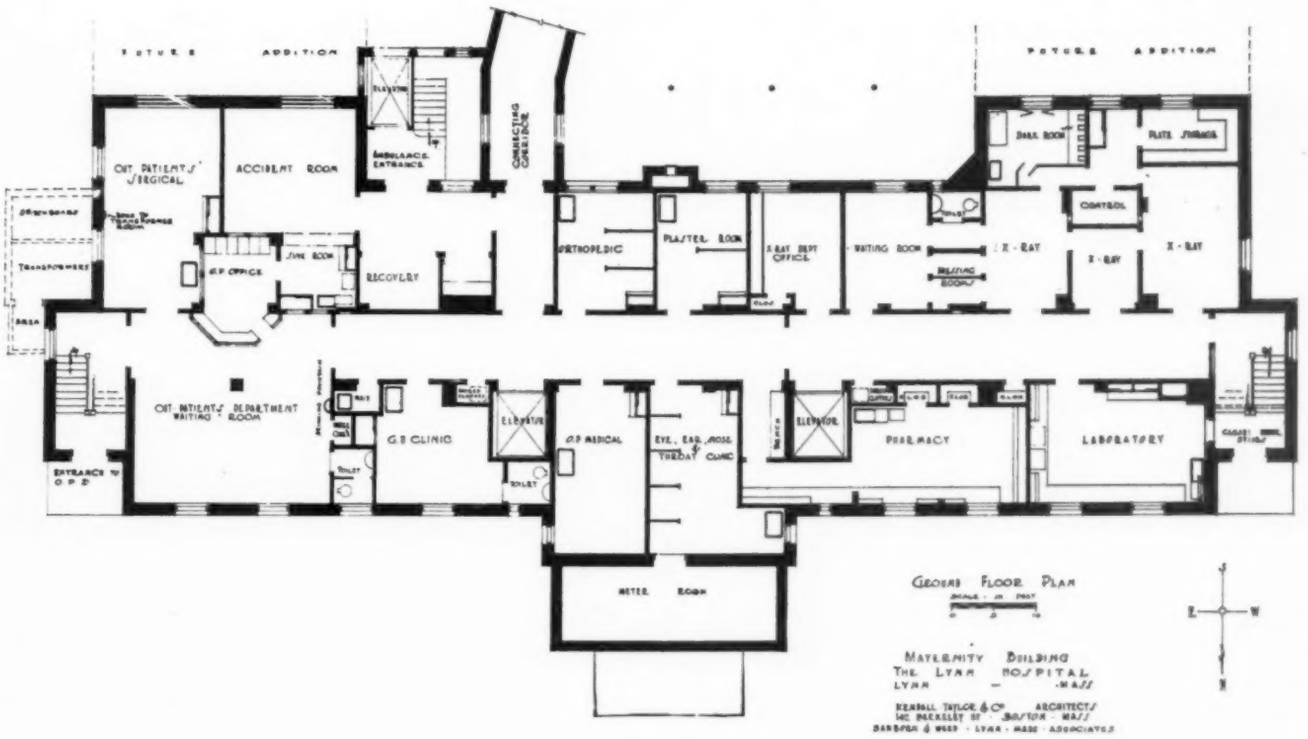
The levels of existing buildings made possible the use of the ground floor with high windows, making in effect a five-story building.

The building, of course, is as nearly fireproof in construction as possible, even to the window and door frames. Externally, it is simple and is of the Colonial or Georgian style of architecture of red pressed brick, with Indiana limestone trimmings. The main entrance, porch and columns are entirely of this material.



The major operating room on the fourth floor. The tile dado is of a bluish shade with a dull finish.

The several departments are placed as follows: On the ground floor the out-patient department, with an entrance at the east staircase, opens into the large waiting room, control of which is from the nurses' room adjacent to the corridor leading to the several clinics of this department. The



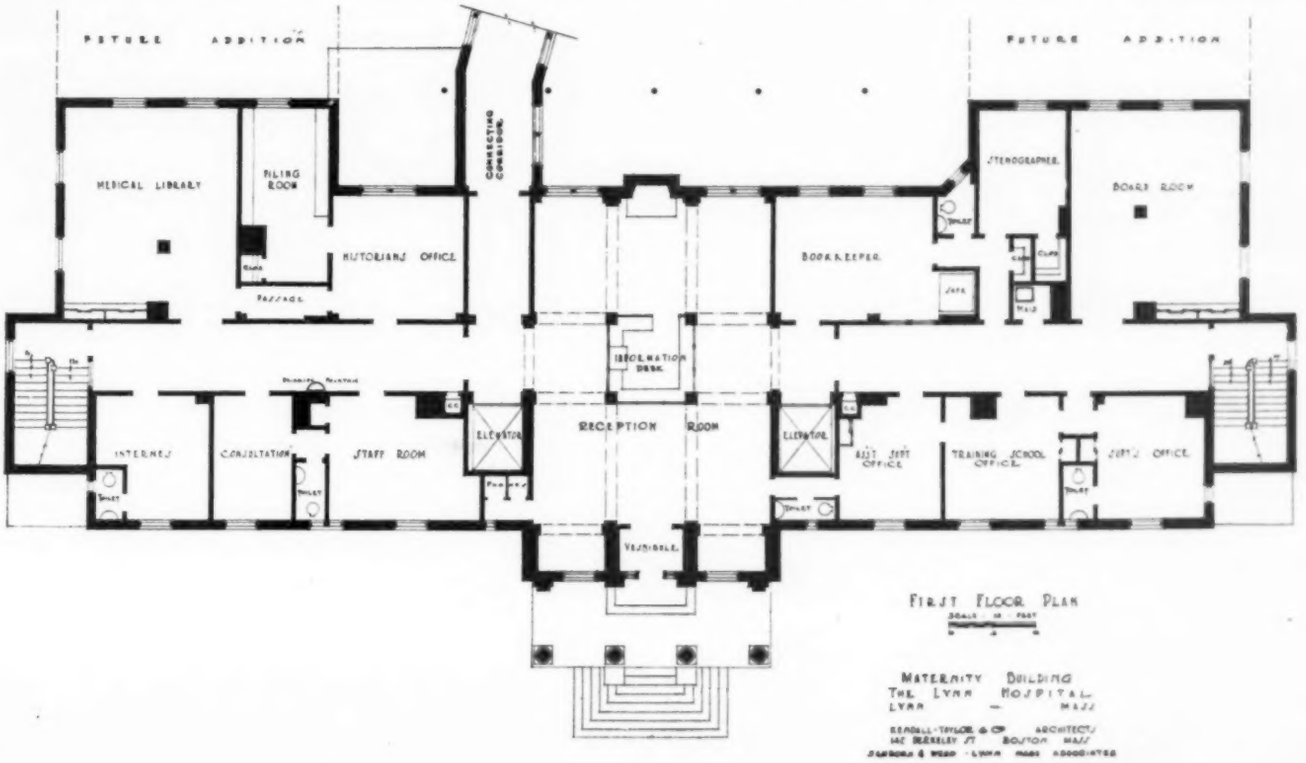
equipment of the department is modern and all table tops and basins are of monel metal.

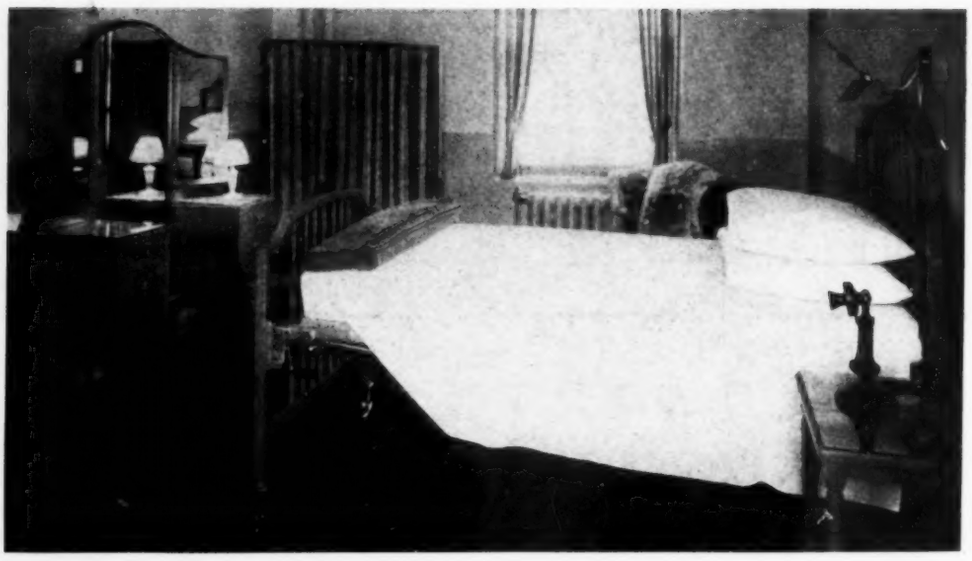
The pharmacy is accessible from this department, and a small waiting space with a bench is provided near the door to this room. This department and the laboratory and x-ray rooms serve both the in-patients and out-patients.

The x-ray department, formerly in an undesirable location in the basement of a ward building, is now well placed. The equipment of all these rooms is modern in all respects. The x-ray and laboratory may be shut off by a cross door in the long corridor when desired. On the other hand, out-patients can use the west staircase, when necessary, to avoid congestion at the usual entrance.

The accident department entrance is from the southeast, opening from a separate drive or court, and as the outside grade is a little higher here an elevator has been placed in the entrance lobby.

The accident room is well equipped for emer-





On the right is one of the private rooms. The color scheme is carried out in pastel shades. Below is the medical library.

gency work. It has an alcove for sinks, sterilizers and other equipment, and an opening into the out-patient department control room, consolidating the clinical work.

The space marked "Recovery" on the plan, and the space adjoining, will accommodate several persons, and a special telephone service for police patrolmen, for communication direct with headquarters is installed here.

The connecting corridor adjoining these rooms continues southward under the old ward to the new ward buildings beyond, and to the service building, all of which have elevators to the ground floor level. This is the principal thoroughfare for non-ambulatory cases to the x-ray department, or to the operating department and return; also for the diet wagons to the second and third floors. This corridor carries the main steam lines from the boiler house, and the electric service lines from the newly established central meter and transformer rooms, controlling the entire plant.

The first floor is the administration floor, and here is the main entrance to the building as well as to the other patients' buildings.

In the reception room is an enclosed booth with an iron and plate glass screen above the counter, where one or more persons are on duty at all hours. The information desk is beside the central switchboard, which controls all lines except the superintendent's private line and certain pay stations.

The reception room is simple and attractive. The columns, pilasters, beams and ceilings are smoothly finished in plaster. The base of the walls is of green marble, the floor is of rubber tiling, gray in color, but varying in tones and of pleasing pattern. Behind the desk the space resembles the waiting room of a modern hotel, with its dainty curtains, richly upholstered chairs and handsome rugs. Its charm is further enhanced by a real fireplace.

Leading from this pleasing room, east and west, are corridors to the elevators, offices, staff room, interns' room, library and directors' or board room. The record or filing room, leading from the historian's room, is fireproof and contains case records of years' standing, arranged for immediate reference.

The elevator opposite the connecting corridor is primarily intended for the operating department on the fourth floor. The only other use made of it, except in emergencies, is for the food wagons to the second and third floor diet kitchens, a special door opening directly into these two rooms. The other elevator is for patients or visitors to the maternity wards on the second and third floors, or from these floors to the delivery room on the west side of the fourth floor.

The machines for these cars are of modern type. The cabs are of steel, finished in gray enamel and equipped with dual control, either individual, selective push button or by regular operator.

The second floor has one six-bed and one five-bed ward, five double rooms and five single rooms. There is also an isolation division where more than one bed could be placed. This has a separate toilet, a separate nursery and a linen room.

Each ward and room, single or double, has its own lavatory. There is a special admission bath for this floor only, and two toilets, one at either end. All single and double rooms, save two, have built-in wardrobes which are set up six inches (at the level of the top of wall base) above the floor. This simplifies cleaning and prevents a cleaner from pushing lint or dust in. There are large lockers for ward patients on the left wall of the passage to the balcony.

The workrooms on both second and third floors at either end, eliminate multitudinous steps, are well lighted and are ventilated mechanically in addition to having windows. There are dry closets, supply cases and adequate sterilizing equipment and other facilities in each of these rooms.

The diet kitchens are relatively large on both floors. There is an automatic refrigerator in each, and equipment to make toast, boil eggs or prepare special light diets, as well as storage for infants' milk.

On the second floor the main nursery is divided with a glazed screen, and each subdivision is under the supervisor's observation and has its own bathing facilities. Nurses' or supervisors' stations have the proper equipment for closets, medicines, means of connection (telephone and signals) and in addition are sheltered from drafts and warmed. On both the second and third floor partitions with doors are placed across the corridors, for isolation purposes and to aid in arresting the transmission of sounds.

Beds Can Be Moved on Balcony

It will be noted that a wide balcony is provided and that beds can be moved thereto directly from the wards. The staircase from one balcony to the one above was a requirement of the Massachusetts state authority on egress, and seems of questionable value; certainly, it is not needed for communication, insofar as service in the house is concerned.

The third floor is the private room floor and has eighteen single rooms and one large nursery, giving an unusual amount of cubic space per infant. In all other essentials it is similar to the second floor.

The private rooms are attractively furnished, five different color schemes having been used, thus giving a pleasing variety. These colors are walnut, mahogany, French grey, pastel blue and parchment. The screen covers and window curtains are made of striped mohair in pastel shades,

FOURTH FLOOR PLAN

and a large wing chair in each room is covered with hand blocked linen in harmonizing shades. The beds all have attached lights with two bulbs, one to be used for reading and the other as a dim night light, if the patient so desires.

Both floors have noiseless signals from each bed which register in the diet kitchen and work rooms, as well as at the supervisor's station. There are also cleaners' or maids' closets, clothes closets and drinking fountains, cooled in tanks on the ground floor.

Linoleum Used on Ward Floors

Floors in wards and private rooms are of linoleum. In corridors rubber tile is used. The bases are of terrazzo, coved everywhere. The walls in patients' rooms have a hard plaster dado four feet high, which is toned darker than the wall above but without a distinguishing line between the two colors. These colors are not too bright, but are warm and cheerful, and the non-institutional feeling is increased by neat, washable window curtains and pleasing furniture. In rooms with more than one bed there are draw curtains hung on wires, put in solidly by the contractor before painting. These doors are stained and are generally, except on the fourth floor, of the two wooden panels type. A few rooms opening onto the center section of the third floor are soundproofed. The floors in workrooms and diet kitchens are of terrazzo. The walls to the top of doors are of tile.

Operating Room on Fourth Floor

The fourth floor is devoted to the operating and delivery services, and in order to keep them absolutely independent of one another each is equipped with its own sterilizing room, workrooms, doctors' rooms, and scrub up room. A locked door between the two departments makes the separation even more absolute. Despite the distance between the new operating room and the surgical building, no objectionable features have been noted.

The operating and delivery room all have terrazzo floors and bases, and each has a floor drain, the floor being slightly pitched to these. This is a practice that varies in different hospitals.

The walls have a tile dado seven feet high, of a light bluish tone and a dull finish. The large sash windows are of a new type recently patented and placed on the market. These sashes are of wood, copper covered, double rebated for wind protection and, except in the nose and throat department, have skylights. Inside the outer sash is another sash or screen set up from the floor with a six inch space underneath. These do not run to the skylight, but terminate just below and are braced to the outer frames. Between the two window sashes is space sufficient for radiators, and the lower half of the inner screen has a sliding sash so that the radiators (which are of open, direct pattern) may be cleaned thoroughly. Heavy plate glass is used, ground in some instances on the lower portion of the inner sashes.

In the operating and delivery rooms, the equipment is modern and carefully selected.

Practically all of these rooms have built-in instrument cases, and adjoining are blanket warmers. Signal systems have also been installed.

The scrub-up sinks have particularly heavy center supporting legs that cannot be broken down, and each one is individual.

The operating and delivery rooms are vented and under local and separate control. All toilet and workrooms, diet kitchens and certain ground floor rooms are also mechanically ventilated, but the control is from the superintendent's office.

HOW TO ELIMINATE LOSSES CAUSED BY WASTE

Much is said at meetings of hospital executives concerning the annual waste in the hospitals of this country. Aside from the waste that accrues in the handling of surgical supplies of various sorts, a great waste results in the use of foodstuffs, linen, to say nothing of water, gas and electricity.

Many hospitals are at present making a strenuous effort to eliminate small wastes by effecting economies through reclamation work. One fifty-five bed institution is now making $16 a week on its waste paper, thereby saving the institution $64 a month. The same hospital finds that it effects considerable saving by rendering its suet into fat that can be used for baking. What is not used for this purpose is made into soap.

Several institutions now reclaim apple and orange peelings out of which they make jelly and marmalades.

It is well known that hospital garbage pails are one of the greatest sources of waste and many superintendents and dietitians are finding that a great saving can be realized through a careful inspection of the garbage can and by constantly reminding employees of the necessity for being careful in food preparation and for guarding against the disposal of silverware, linen, and cooking utensils which are too often found to have been carelessly thrown in the garbage can.

Realizing that the institution had an excess of garbage, one superintendent found, upon investigation, that the hospital averaged fifty-two cans per day, which were being sold to a garbage man for $250 a month. After careful inspection and some lessons in economy brought to the attention of employees, the number of garbage pails was decreased to twenty-six a day.

Small economies can thus be effected in almost every department of the hospital. In the housekeeping department, linen can be repaired and reclaimed, torn blankets can be mended and made into smaller ones, torn towels can be made into wash cloths and old rags, when they cannot be used for other purposes, can be sold for fifteen cents a pound.

HOW TO GAIN PERMISSION FOR AUTOPSIES

By Burgess Gordon, M. D.,
Philadelphia

IN THE investigation of disease there is possibly no field of study more important than postmortem examination.

This has been emphasized by Dr. H. A. Christian, Boston,[1] who states that a hospital service is essentially incomplete without a check-up on the clinical diagnosis of the fatal cases. He further states, that "the percentage of necropsies is the best single index of the professional efficiency of the hospital."

This opinion is worthy of deepest consideration. It is plainly the duty of the hospital toward the community to conduct careful scientific study and treatment of the sick, and this branch of medicine cannot be overlooked. However, because of the natural aversion of most people towards necropsies the problem of increasing the percentage is difficult to solve. It may be of value therefore to consider some of the influences that react unfavorably upon the granting of necropsies and the various methods that have been evolved to overcome these prejudices and to dispel the gruesome idea generally held of the postmortem examination as viewed by the average uninformed person. Such persons must be convinced of the importance of this method of acquiring knowledge.

Perhaps the factor of greatest importance is the relation of the hospital to its immediate community. Does the hospital appreciate the value of maintaining the good will of the various religious and racial groups among which it functions? Does it strive to create a feeling that it is not the last resort of necessity but a place to which people may turn gladly in time of need? Is it realized that a suspicion still exists among certain classes that hospitals are places for experimentation?

At his first contact with the hospital the patient is essentially fearful and the manner of any hospital officer with whom he comes in contact will either allay or increase his fearfulness. It will also please or antagonize his relatives and friends. For this reason it is well to select tactful individuals to fill certain positions. This applies, among others, to ambulance drivers, doormen, telephone operators, admission officers, and orderlies, all of whom are in many instances brusque and indifferent.

During the patient's residence in the hospital he should be conscious of an interested and sympathetic attitude on the part of nurses and physicians. Administrative details should be adjusted with due regard for the physical and nervous condition of the patient. Hospital staffs should realize that in an institution there is often one individual whose overzealous tactics may antagonize everyone, so that his very efficiency may be a detriment rather than an asset. This is sometimes true in the instance of the officer who admits visitors to the wards, the clerk who presents bills or the technician who has an officious manner when talking to patients or their relatives and giving them the information they seek.

It is sad to relate that even in some of the less busy hospitals small attentions in the sick room are often disregarded. Relatives must remain

Community Good Will a Factor

DEATH does not end a hospital's obligation toward its patients and if no postmortem is performed a case must be regarded as forever incomplete. Autopsies, aside from their value as related to curative medicine, have a distinct contribution to make to preventive medicine and public health. There is no worthy substitute for this method of acquiring medical knowledge.

The responsibility of obtaining permission for autopsies rests upon hospitals, and their failure in this matter cannot be excused merely on the ground that relatives are opposed to such procedures.

Yet we cannot expect to broadcast the value of postmortem examinations, nor can we in a moment impress upon the ignorant or prejudiced the reasons for performing them, neither can we demand that all bodies be autopsied. It is possible, however, through a cumulative effect to gain the confidence of the people so that when a request is made there will be no hesitancy in granting it. Logical arguments are essential, a knowledge of psychology is helpful, but no single factor is so important in the obtaining of autopsies as the good will in which the hospital is held by the individual and the community.

standing at the bedside; they cannot obtain a welcome glass of water, or on hot days a fan that might contribute to comfort. Not infrequently it is impossible for the relative to receive direct information about the patient and no one informs him what to expect. Often at the time of death there is no one to bring relief in the sad, trying situation.

There are other considerations for comfort that should not be neglected. A feature often overlooked is a secluded room to which relatives and friends of very ill patients may retire for conference with an intern or for rest during their long hours of vigilance. In addition to their anxiety they must endure the gloomy corridors, hard and stiff benches, and disturbances from other patients, all of which are most depressing. It is not surprising that visitors who have no animosity toward the hospital will find themselves in morbid speculation in such surroundings. It is realized that most institutions are pressed for funds and cannot provide a luxurious room for such purposes, but it is possible to attend to certain of the simpler needs, such as light and ventilation.

The kindness with which a patient is treated from the time of his admission, the courtesies extended to his relatives, and the general atmosphere of the hospital are of the greatest importance when the time comes to request an autopsy. A thoughtful regard in all respects for public sentiment should be a matter of course, obviously, not only for the sake of obtaining necropsies, but because it is essential to the life and growth of any institution to have the good will of its clientele. Undoubtedly this is necessary when it must appeal for funds or support in some issue. In reputable business organizations good will is considered an indispensable asset. For a hospital such good will is equally necessary. Therefore heads of departments should devise a plan for impressing the importance of this subject upon those under their charge.

What to Avoid

Another influence that should be recognized is the hospital's reputation in caring for the dead and in performing autopsies. The careless execution of either of these functions causes a feeling of resentment toward the hospital and is a source of criticism from the funeral director and relatives. It is not surprising that a body in which the jaw is carelessly bandaged and which has remained in an improper position until rigor mortis has set in, or a body that has been autopsied and left with badly tied vessels, scars or bruises, is difficult to embalm and is not presentable for the funeral.

The undertaker's point of view is ably expressed by Dr. A. H. Chandler and many valuable suggestions have been embodied in a report of the New England Hospital Association.[2] These should be familiar to all persons who are directly concerned with caring for the dead and with performing autopsies.

Moreover, in requesting a postmortem the relatives should not be misinformed about the extent of the examination. A lasting resentment may be the result when a mother finds that a complete autopsy was performed on her son when she expected only a small incision. The effect of such action will naturally have an unfavorable influence upon her entire circle of friends.

Strict Supervision Is Necessary

Members of hospital staffs should appreciate the necessity of strict supervision of the autopsy room and should insist that care be exercised in discussing certain procedures. Furthermore, persons with morbid curiosity should not be permitted to view a necropsy because the garbled reports spread by such individuals are detrimental. Here is an example that emphasizes this point: A scrub woman employed by a hospital surreptitiously watched a postmortem, and spread such a lurid account of the scene that within three years, the relatives of two patients refused to grant an examination because they had heard her story. Such occurrences explain the impression which many people have that in the postmortem the body is dissected and mutilated.

An organization should exist which has authority at the time of death to obtain permission for the autopsy. This plan should function smoothly since, if relatives leave the hospital without being approached on the subject, it is usually difficult to find them again in a suitable frame of mind, because they are apt to be influenced adversely by other relatives and friends. Furthermore, if the undertaker has been directed to care for the body, and plans are under way for the funeral, there is likely to be a failure to secure permission.

The question naturally arises as to the person who should approach the relatives concerning the examination. In some institutions one person has been selected and trained for this purpose. However, this method is usually unsatisfactory, because it is difficult for anyone but the intern to acquire close personal contacts. When the intern is selected some responsible person, preferably the resident physician, should instruct him in the best approach and suggest answers to the objections commonly raised against necropsies. It is essential that no one interfere with the plan because conflicting arguments, however well intentioned,

are likely to be disastrous. Nevertheless, it should be appreciated that there are several persons on the staff who may have had previous dealings with the relatives and who may be of service at this time. For instance, there is a record of one person who, although her duties as admitting officer did not require her to ask for necropsies, was instrumental in procuring seven in one year. In not a few instances members of the social service department have been of considerable aid.

The intern should understand the religious and cultural background of the community that the hospital serves, because these peculiarities will determine the trend of discussion. Since the usual objections have no basis in the laws of the various religions, but are merely the result of impressions and prejudices, the intern must be prepared to refute them. For instance, there is no regulation that forbids autopsies among the Jewish people. As a matter of fact, their religious leaders sanction and recommend such examinations. This is true also in the Christian religions. The intern should be familiar with such reports as that of J. Z. Lauterbach[3] on the Jewish attitude towards autopsies, as well as with the writings of Christian authorities.

The most successful arguments are those that make a positive rather than a negative appeal, as, for instance, that religion is essentially humanitarian in its aims and hence must support every effort to eradicate disease. Under no circumstances should the feeling be allowed to exist that an autopsy is performed from motives of idle curiosity, but rather that it is an expensive and tedious study for the hospital to perform. Undoubtedly there are numerous arguments that may be advanced to meet other objections. These are well reviewed in an article by Dr. E. M Bluestone.[4]

Alertness and Supervision Essential

Of great importance is the alertness and persistence of the intern in seizing every opening and in exhausting every means to gain the necessary permission, even by visiting relatives at their homes. However, in no event should he allow members of the family to leave the hospital with a feeling of resentment. If they depart with a good impression, it is not uncommon, after the body has been buried, for them to regret that a necropsy was not performed. In one case permission for autopsies on two children was refused by the father, for sentimental reasons. Later when the third child died in the same hospital, he granted permission for an examination, stating that he now realized all the hospital had done for his family and how reasonable was its request. He also regretted that he had refused the first permission. Thus the hospital eventually benefited, which would not have been the case had the father been antagonized. Furthermore, in cases where autopsies are granted an appropriate letter should be addressed to a member of the family expressing the appreciation of the hospital and enclosing a nontechnical report of the findings.

The experiences of interns and other members of the staff should not be forgotten. In order to benefit from these experiences a record of each outstanding case should be made in a book accessible to the interns. Of special interest is the record of cases in which no permission was obtained. The objections and the course of events should be of value in understanding the psychology of the community and locating the fault if it occurred within the hospital. In the successful cases there is value in knowing what were the arguments and general approach that proved effective.

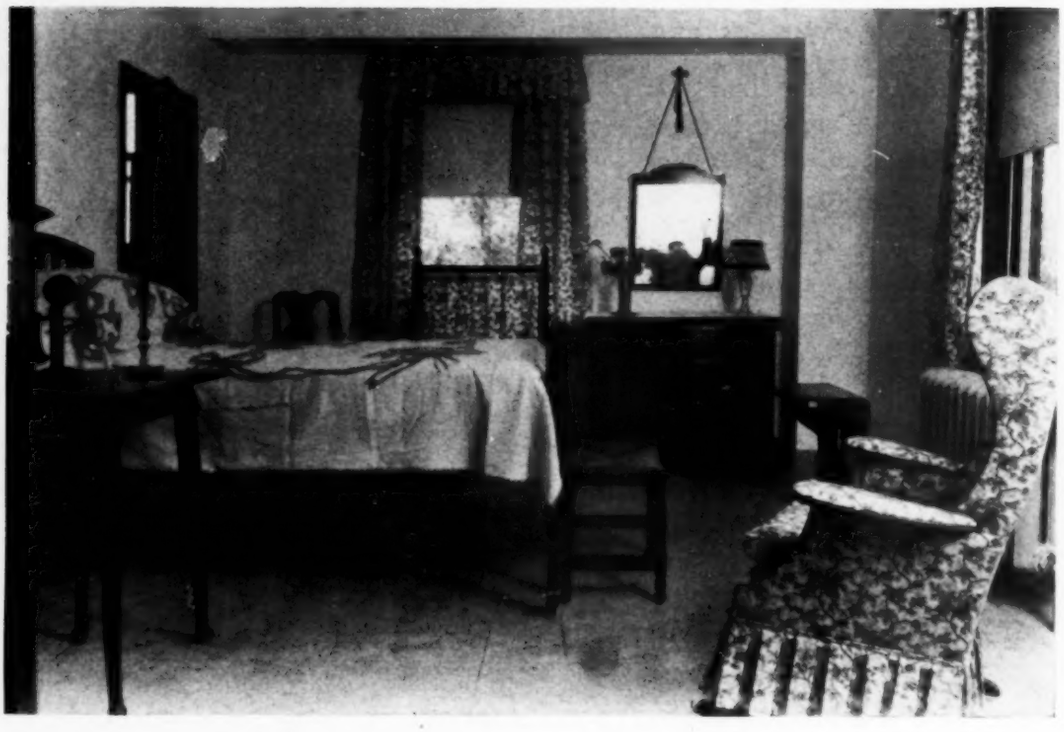
The resident physician and surgeon should be directly responsible to their chiefs for the percentage of autopsies. They should stimulate as well as instruct the interns, and should be available whenever difficulties are encountered. They should also make a special effort to interview undertakers, relatives or friends, who may have interfered with the granting of autopsies, and should correct erroneous impressions about the hospital and the type of study requested. The postmortem books should be edited by them and a record kept of the percentage of each intern and of the total percentage of their respective services. These percentages should be posted monthly. At intervals letters concerning them should be addressed to the chiefs of service, asking for their comments.

The hospital association of a city, or of adjoining cities, may at round tables discuss the subject of postmortems and ways and means for increasing the percentage. These associations, in addition to furnishing monthly and yearly reports with comparative figures for previous years, may serve as a body to consider the objections against autopsies and the complaints about the manner of performing them. It is certain that one institution which is indifferent to the feelings of its clientele in the performing of autopsies may injure the prospects of all neighboring hospitals. For this reason the hospital association may be of considerable influence in dealing with certain practices.

Bibliography

1. Christian, H. A. Selecting a Hospital for an Internship. Jour. Am. Med. Ass'n, 86: 1499, May 15, 1926.
2. Chandler, A. H. Report of Committee on Autopsies of the New England Hospital Association. Requirements for Cooperation Between Hospital and Funeral Directors. Boston Med. and Surg. Jour., 194: 1, April 22, 1926.
3. Lauterbach, J. Z. The Jewish Attitude Toward Autopsy: Are there Conscientious Objections on Valid Grounds that Hold Good in Our Time? The American Israelite, Nov 19, 1925.
4. Bluestone, E. M. The Value of Postmortem Examinations and Methods of Obtaining them. THE MODERN HOSPITAL, 18: 1, May, 1922.

Colonial Furniture Adds Charm and Dignity



The proverbial hospital atmosphere is being shunned in furnishings and in this reception room many homelike touches will be noted. This style of decoration is restful and adds to the charm of the room.

Artistic furniture and cheerful color schemes are appreciated by the patient. Here is a patient's room that has been furnished with authentic reproductions of artistic early American furniture.

CREATING CONTACT POINTS WITH THE COMMUNITY*

By B. A. Wilkes, M.D., Superintendent, Missouri Baptist Sanitarium,
St. Louis

THE fact that you are here indicates your interest in hospital work and your desire for the progress of such organized efforts in behalf of sick and suffering humanity as may grow out of what we do here this week.

Each of you is present upon an important mission. There can be no mission more important than that of ministering to the afflicted. Unless we who are engaged in the profession and the business of developing and operating hospitals recognize this fact, then we have mistaken our calling. As I have intimated, our calling is both a profession and a business. Unless sound modern business methods are followed, alongside of the professional work of hospitals, we cannot hope to succeed in "selling" the hospital to the public.

A building does not make a hospital, any more than a suit of clothes makes a man. No matter how beautiful the design or how costly the equipment, it is after all the human factor that constitutes the hospital. We may build modern structures of several stories and hundreds of rooms—they are not hospitals unless the administration is efficient in all its branches. Efficiency necessarily includes the ability to carry on according to the best usages of everyday business.

Business Methods Needed

Professionalism in hospital work is not enough. Over and beyond the sincere and intelligent practice of our profession as physicians and surgeons or as nurses, arises the necessity for the intelligent and faithful practicing of business methods throughout our institutions. Up-to-date equipment is not enough. Scientific handling of such equipment is not enough. Thoroughly efficient organization and system inside the hospital are not enough.

There are two sides to every question and two sides to every hospital—the inside and the outside. We have been perhaps too prone to ignore the outside while attending faithfully to the inside. It is highly important that we be in close touch with the public—the outside; that we employ methods of approach and contact that will serve to make the public acquainted with the inside of the hospital without necessarily coming into it as patients; that we so conduct our institutions that the outsider, when perchance he becomes, through sad necessity, an insider for a period brief or extended, will know he is entering a place where medical and surgical practice is not a vague theory but a substantial and scientific fact; and where the general administration includes practical methods for obtaining all-round efficiency of medical and surgical service and of nursing.

Must Meet Changing Conditions

Progress is the law in hospital administration as in all other things. "New occasions teach new duties, time makes ancient good uncouth," wrote the poet Lowell; and that quotation contains more truth than poetry. As applied to hospitalization, perhaps no man can realize the truth of it more keenly than one who, like myself, has been for more than thirty years at the helm of a modern hospital. It is our business—it should be our pleasure as well—to readjust ourselves to these changing conditions, to the new demands, to the new occasions that present themselves upon every hand as the years pass. Hospital work develops from day to day new duties to fit the new occasions. There has been amazing progress in the past thirty years; there should be still more amazing progress in the next thirty years. It is for us to dedicate ourselves here and now to the acceleration of that progress.

One of the outstanding advances that have taken place in my own time is the humanizing of the hospital. All of you who have been connected more or less intimately with hospitals in recent years must have observed the rather rapid progress of this process of humanization. You will recall that in years by no means forgotten by any of us of the older school, the general public was mortally afraid of hospitals. People had such a horror of the oldtime hospital that thousands of them stayed at home and died miserably when their lives could have been saved and the blessed boon of restored health granted them by submitting to hospital treatment.

It must be admitted that in some instances there was solid basis for such fear. Hardly more than one generation has passed away since the illustrious Pasteur endowed the race with his epoch-making discoveries, which have revolutionized the practice of medicine. That great but

*Read at the meeting of the Tri-State Hospital Association, Kansas City, Mo., May 27, 1927.

humble French chemist and bacteriologist died only a couple of years before I became superintendent of the Missouri Baptist Sanitarium in St. Louis. I had been in my present post about fifteen years when Lord Lister, father of antiseptic surgery, passed away. It is astounding to contemplate how brief a period has passed by since these two paramount benefactors to the human race lived and wrought for the prolonging of life and for the amelioration of pain, if at the same time we take into consideration the swift and splendid progress made in medical and surgical practice chiefly through the patient labors of these pioneers.

Why People Feared the Hospital

There may be old men who remember personally the battlefields of the Civil War, when a puncturing wound in the abdomen meant almost certain death and when gangrene so frequently followed the amputation of a limb. Hospitalization as we know it now has grown up since that war, and in its larger and better aspects it has developed within the memories of men now hardly of middle age. It required years and years of patient and devoted labor upon the part of our profession before the hospitals adopted and followed with any degree of efficiency the discoveries of Louis Pasteur and Joseph Lister. By slow degrees the hospitals learned, many of them through bitter lessons, the necessity of rigid adherence to antiseptic measures. In days remembered by the older men here, the lay public had a right to feel considerable timidity with regard to the average hospital. Nowadays such an attitude, as we know, is based altogether upon two things—a sort of superstitious awe of a huge house where sick people lie abed in wards and chambers, and a lack of knowledge concerning the true inwardness of the average hospital.

We who are in hospital administrative posts, or who serve as physicians, surgeons or nurses within hospital walls, are well aware that a person in urgent need of surgical attention or medical treatment is far safer inside than outside a hospital. But it cannot be denied that a certain element of the outside public still harbors the ancient horror, and it behooves us who know the truth to proclaim it to those who need to know it— the truth that will make them free of disease if they learn it in time and act upon it. So, here again, we arrive at the proposition of "selling" the hospital to the public—of the inside coming into proper contact with the outside.

This is to be done largely from the inside—by carrying on the work of saving life and restoring health in a manner so highly efficient that the outgoing patient will become our best salesman. I have spoken of the humanizing of the hospital. In my own time I have observed much of this humanization, and I may be permitted to say that I have done what I could to accelerate the process. It is gratifying to be able to state that in the many hospitals I have visited since I rode into St. Louis to assume the superintendency of the Missouri Baptist Sanitarium, almost upon the back of the great cyclone of May 27, 1896, I have observed splendid progress in kindliness, in courtesy, in the sympathetic attitude, upon the part of hospital people, from the assistant janitor to the chief surgeon—and even the superintendent.

Why, people nowadays are becoming really fond of hospitals. In the old days we were born at home and we died at home if we were so fortunate as to possess a home wherein to die. In these modern times we are born in hospitals, we retire to homes and live there until we are more or less ready to die, then we return to hospitals and die there where we began to live.

I have read recently that in Iowa City, Iowa, about ninety out of each one hundred babies are born in hospitals. Surely those Iowa City mothers are efficient saleswomen. They go out, having been safeguarded by scientific care against disaster, proudly displaying their healthy infants and proclaiming to other expectant mothers the virtues of hospital beginnings—whatever they may think of hospital endings.

In my city, and in yours no doubt, hospital beginnings are increasingly numerous. Why so? Because the hospital has been humanized. The hospital has been "sold" to the mothers.

The Role of the Hostess

In a recent article in the *Saturday Evening Post* I find this pleasant paragraph: "In one middle-western hospital, nowadays, when anyone enters the front door a woman rises from behind a table and goes forward as graciously as if she were welcoming a guest into her home. It does not matter how shabbily the person is dressed, or what is his mission. She is uniformly charming and eager to be helpful, because that is what she is paid for."

This woman is known as the hostess, and the writer goes on to say: "The smile of that hostess is the contact point of the hospital with the world. If some mother arrives in hysterics soon after an ambulance has delivered at the emergency room some small load under a sheet that is rapidly turning scarlet, it is this woman's mission to comfort her. If there is only that grimmest of human stories to tell, she tells it with a gentleness that is wholly admirable. Who would dare

to deny that such work is of equal importance with that of any professional task?"

The modern hospital must have many points of contact with the world, else will it fail in its holy mission to humanity. Its business administration should keep step with its professional administration. It should be managed as a business project so that it need not be necessary to rob Peter to pay Paul. By this it is meant that a proper balance should be struck between the income and the outgo, with an equalizing of the benefits and advantages between patients of all classes. The rich patient is taken care of by his money and has no worries other than his ailment. The poor patient is taken care of, or should be, by what we are pleased to term public or private charity. Between these two is the patient whose income is moderate. He is the one who suffers most. Too frequently he is barred from hospital service because the rates are not adjusted upon a basis more nearly equitable. This, I would suggest, is a matter to be taken up and considered carefully and prayerfully.

State Meetings Are of Value

We should regard our hospital meetings, such as this one, as training schools or postgraduate courses for hospital administrators, boards of trustees and physicians' staffs. For superintendents of hospitals these meetings are indispensable. They are held for the advancement of service, and no hospital can hope to keep pace with rapid modern progress without availing itself of the information that may be obtained at such sessions. Few persons know the problems that confront a hospital superintendent every day. Hospitals of today are facing greater responsibilities than ever before and we must build up our organizations to meet such requirements. The general public is making greater and greater demands upon us. It is for us to rise to the occasion and meet these demands.

The American College of Surgeons has done much to improve our work and continues to extend a helping hand in our upbuilding. England's great laureate sang of "the glory of going on." That phrase might fitly become our motto or slogan—the glory of going on. Many a hospital in recent years has developed from a sort of medical boarding house into a scientific institution where professional knowledge is applied with the purpose of doing the greatest good to the greatest number. The American Medical Association wants to know if your hospital or mine is of such grade and standing as will make it worth while for a young man just rounding out his medical and surgical education to serve in it as an intern. The medical colleges are making similar inquiries. The state boards of nursing are interested in the hospitals, desiring to learn if they are fully equipped and adequately managed and will give the student the proper training to fit her for the profession which she has chosen. State and city boards of health are concerned as to the kind and character of service that is being rendered to the sick.

How to Aid Small Hospitals

The small hospital in the small town or the rural district is a community asset and a necessity under modern conditions, but its problem is serious and difficult unless it is aided by county taxation or by community contributions or endowment. Would a close affiliation with larger hospitals solve the problems of these smaller institutions, improve their service and raise their standard? This is a matter that invites your serious attention.

I feel that the American College of Surgeons must be our counsel and our guide. I feel also that hospitals should adopt the same business principles that obtain in any other well conducted enterprise, to the end that they may be successful and may render the service that is expected of them. The hospital is the most important business enterprise in the community, and it should be conducted in a way that will win the confidence and the respect of the physicians and of those who must be its patients or its patrons.

I believe that the formation of a Mid-Western Hospital Association, grouping together the several states that are closely connected geographically and socially, will do much toward stimulating our hospital work and bringing us in closer touch with the various problems that confront us, the solution of which is vital to our hospital activity and to the improvement of our service in all its branches.

The medical profession and the lay public are depending as never before upon our hospitals. We must supply the need and render the service. We are custodians of many millions of dollars invested in hospital property; and let it not be overlooked that we are custodians also, in a sense even more intimate, of the lives and the health of many men, women and children, which are of value far beyond mere money or its equivalent.

The late Rev. Dr. T. DeWitt Talmage, Brooklyn, once began a lecture delivered in St. Louis by saying: "There are three kinds of people living in this world whom I greatly admire—men, women and children." These are the three kinds of people whom we as conductors of hospitals must greatly serve.

REGULATING OPERATING ROOM TRAFFIC

By Philemon E. Truesdale, M.D.,
Fall River, Mass.

TRAFFIC regulations in general provide for an orderly conduct of the public business. Modern kinematics, or the transit of man and his materials, has been made possible only by utilizing police systems, signals and other agencies to direct the ever growing stream of travel on the roads of town and country.

P. T. Barnum could not make his famous animal show pay in New York City until he solved the traffic problem in his huge tent. Patrons crossed and recrossed the grounds; some went over the course more than once, so Mr. Barnum erected this huge sign at the end of his tent opposite the entrance: "To the Egress." As the spectators passed through the canvas alley toward the "Egress," which they thought to be a wild animal, they soon found themselves in the outside air.

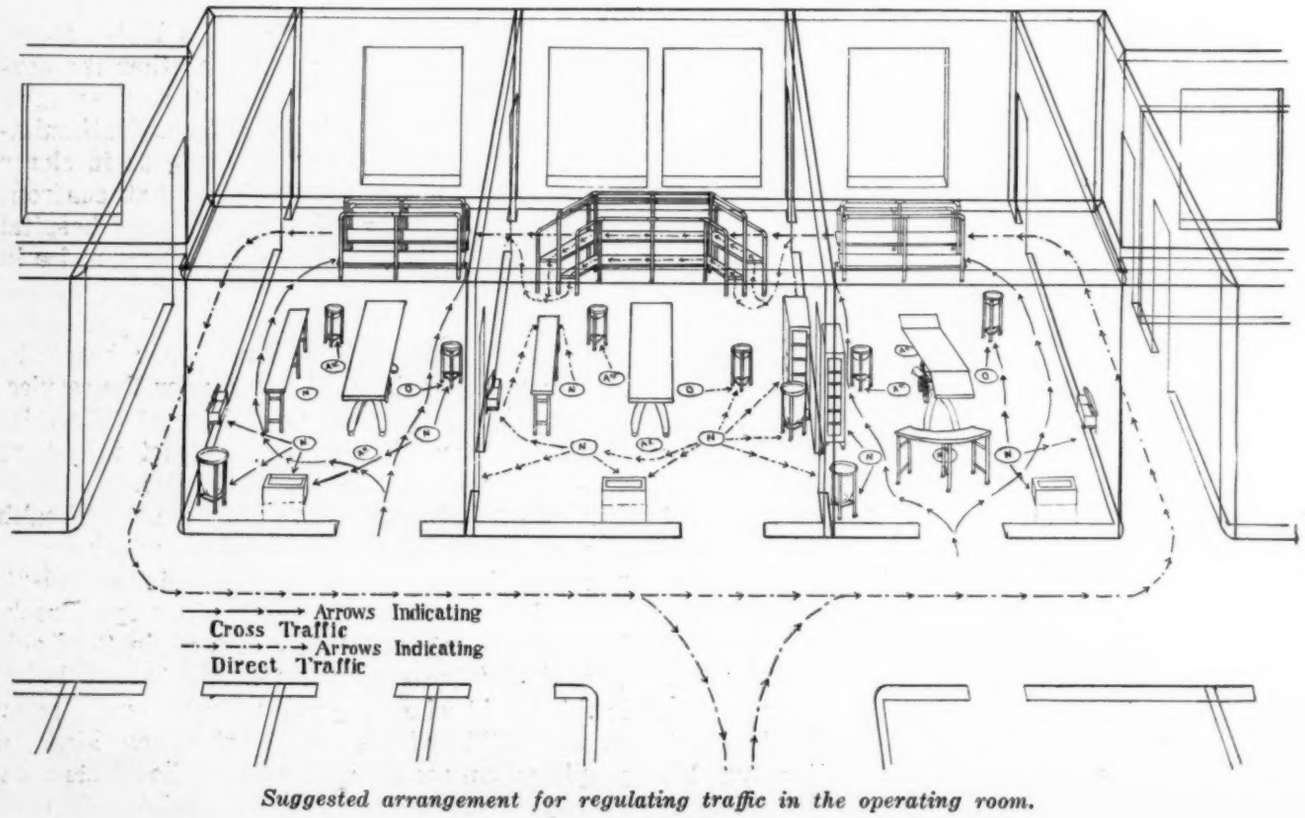
The principles of traffic control already established for the road are found to have a much wider application. They were used extensively in the transport service during the world war. On land and sea and in the air, automobiles, trucks, ships and aeroplanes, as well as individuals and groups of individuals, were obliged to conform to the principles of orderly traffic. In no department of the army were these regulations used to greater advantage in the prevention of conflict and delay than in the hospitals.

In the mobile hospitals, for example, the wounded were transferred from the ambulance to the "triage" or admitting tent. When the necessary routine was carried out there, they were moved on to the x-ray department or to the shock room, as conditions required, thence to the operating room.

From the operating rooms the wounded were transferred to a tent for the dangerously wounded, or to another for the moderately severe cases or to a third for the ambulatory or slightly wounded, all moving in one direction toward an evacuation tent close by the railhead or ambulance station. Once started, the wounded man moved in one direction until all parts were treated and he was set for the long, long trail.

A casual visit to the average hospital gives one the impression that orderly traffic is not an applied principle there, except at the kitchen-dining room communication where it is universally recognized as indispensable. Regulation of traffic is not essential in all parts of hospital travel, but it could and should be improved in every operating room.

Its significance in this department has not been



Suggested arrangement for regulating traffic in the operating room.

given the important consideration that it deserves. In addition to embarrassment and hindrance, haphazard motion or commotion in the operating rooms carries the possibility of breaking down the defenses against infection however well they are planned.

It can be said without fear of controversy that the operating room has received little attention from the critical students of hospital organization, planning and management. Perhaps this is to be explained by the fact that surgeons themselves vary widely in their views upon what constitutes the ideal functioning of an operating room and of its personnel.

In order to establish and maintain orderly maneuvers in the operating room, most surgeons will agree that continuity of service for all assistants and for the surgeon in particular is the *sine qua non* of success. The rotation of services among the visiting staff and frequent replacements among assistants and nurses, at once lower the standard of operating room dispatch.

Reserve Room for One Surgeon

The use of the same operating room and nurses by more than one surgeon and his assistants is not good practice. Especially is this true when one group is waiting, often impatiently, for the occupants of the operating room to take leave. The effect of such an arrangement upon the supervisor and the scrub-up nurse is often such as to convince the casual observer that such a system is dangerous and fundamentally wrong. Orderly business cannot be expected in such an atmosphere.

In some hospitals, notably abroad, the area of activity in the operating room is inclosed by a circular guard railing of one inch pipe. This means of defense is no longer practicable, since much of the equipment of the operating room, utilized at some time during an operation, is in the form of wall fixtures. Therefore the brass pipe ring can no longer be employed without interfering with the supply of material to the operating team.

Few individuals not engaged in operating room activities can pass through a room set up for an operation without causing alarm. Brushing against a sterile sheet, gown or basin, to the casual visitor may scarcely seem of consequence, while everybody who has a part in the operation is in a state of tremor. The offender is always sorry and perfectly polite about what appears to have been an insignificant detail. Usually he is correct in his deduction that the incident is unimportant, but the operating room personnel is trained to a perfect chain of defense. The knowledge that a single break has potential possibilities of far-reaching significance leaves them in a state of mind that is not as tranquil and confident as it should be for undertaking major responsibilities.

It remains, therefore, for the surgeons so to plan the operating rooms as to exclude all excess traffic from the immediate environment of the operating table, at least. In fact it is desirable, if not essential, to provide for the mental comfort of the visitor as well as for the safety of the patient. The visiting doctor should not be obliged to negotiate hurdles in order to find his proper place in the operating room, nor should he be expected to worm between operating room furniture, covered with sterile linen.

There should be a well posted one-way trail for him to follow, from the coat room to the various operating rooms and waiting room and exit. In most of the larger hospitals constructed during the past few years, operating rooms have been arranged in such a manner as to provide for the visitor. Some of the systems are elaborate and costly but among these are found the most practical from the standpoint of utility and safety.

It is noticeable that the same plan is seldom used twice, which induces me to submit the accompanying sketch for study and criticism. The visitor enters the first operating room from a narrow passage leading off the main corridor. He passes from one operating room to another and out, having had the most advantageous position for observation, and without at any time or in any of the operating rooms having crossed the danger zones of the operating field. The entrance is near the doctors' lounging room.

This seems to be a simple way of solving at least one traffic problem in the hospital.

HOW TO FACILITATE GOOD WORK IN THE LABORATORY

All orders for laboratory work should be in writing. This applies equally to the physician giving the request and to the nurse transmitting it to the laboratory. An order for laboratory work taken orally, and given orally to the laboratory will in about 50 per cent of the cases be wrong. Indefinite terms, such as "blood test," "spinal fluid test," should never be used, since they leave the pathologist in the dark as to what the physician really desires.

It is the nurse's duty to see to it that the physician puts down specifically what he desires in the way of laboratory work. Telephone requests from a nurse for laboratory work should not be tolerated, any more than verbal requests. In emergency of course, exceptions will have to made. It is important to state that written requests should be plainly written, giving the patient's first name or initials, with the surname correctly spelled, room number and the name of the physician in charge of the case. This should be taken to the laboratory at once, and not simply at a time when it happens to be convenient for the nurse.—*American Journal of Nursing.*

STUDIES ON HOSPITAL PROCEDURES

THE article that appears under this heading in this issue represents a slight departure from the type of discussion that has hitherto been placed here. Nevertheless, it is the intention of the writer to set forth in just a little more intensive way than formerly perhaps, a study of an important hospital procedure.

Efficient hospital practice is a composite that represents careful attention to many details, and even if to the casual observer many of these matters may appear trivial, none is of little importance if it in any way affects the patient's welfare.

It is our intention, therefore, to discuss below in detail what appears to represent the best technique of preventing irritation of the baby's skin, during the diaper period particularly, whether it amounts to but a mere chafing or assumes the proportions of a more serious excoriative dermatitis.

A PHASE OF INFANT CARE

In order to secure a cross section, that would represent the opinions of physicians devoting their attention to the treatment of children, and of hospital superintendents and nurses as well, a questionnaire was dispatched to 168 hospital administrators, 112 physicians, (most of whom were pediatricians, although there were included a scattered number of obstetricians, orthopedic surgeons and general practitioners) nine superintendents of schools for nurses, and one representative of a popular monthly magazine with a large circulation. This letter contained the following questions:

1. What is your practice in protecting babies against chafing?
2. Do you advise any special talcum or any powder, and if so, why?
3. Do you use creams or oils of any kind, and, if so, what are they and why do you use them?
4. Has there been any change in recent years in the practice of protecting babies' skins during the diaper age, and what are your recommendations to mothers regarding this matter?

The editors of THE MODERN HOSPITAL were much pleased and gratified by the prompt and thoughtful response that this questionnaire elicited. Upon a casual perusal of these answers it soon became apparent:

First, that there was no unanimity of opinion in regard to the preventive or curative measures generally employed by physicians and hospitals;

Second, that the problem quickly assumed greater proportions than the mere recording of the powders, ointments and lotions that were preferred because of their soothing and cleansing properties;

Third, that in the minds of many of those interviewed, prevention and cure had been somewhat confused. Since many valuable suggestions were made in regard to the latter phase, and since some of the procedures and preparations appear both preventive and curative, the scope of this study will be somewhat enlarged to cover the treatment of skin irritation and excoriation in the newborn.

Cleanliness Is Chief Factor

Almost without exception, the fact was stressed by all that cleanliness was the chief factor in preventing irritation of the baby's skin, and not a few answers made plain the belief that no single remedy or combination of treatments could be uniformly and successfully applied to all children. This individualism in treatment represents the soundest of therapeutics.

Another fact which is of the greatest importance in the treatment of any condition was included in these answers, namely, that the successful prevention and treatment of irritation and inflammation of the child's skin, requires that a search be made for the cause, which often is far removed from the condition being treated.

It has been said above that many factors quickly entered into this problem. These included not only a consideration of the child's general condition, such as the presence or absence of teething, the existence of the common coid, or other bronchial infection, of rickets, malnutrition or other diathesis, but also improprieties in the child's diet, and the use of irritating clothing, soaps and medicaments. One could not but be gratified by frequently reading in the letters forwarded by hospital superintendents and physicians, that no trouble is experienced in their institutions from the standpoint of chafing in children.

On the other hand, not a few remarked their satisfaction in having the problem studied, and their interest in reviewing the results of this inquiry. Such responses as, "We have no rules in regard to this matter but one, and that is, to keep the baby dry," "We have had only one case of dermatitis among 800 babies born in our ma-

ternity last year," suggest the presence and efficiency of skilled local supervision, or the reverse where this difficulty occurs.

Moreover, the several answers that were received to the effect that the question of preventing and treating excoriation of the skin in children of the diaper age, is largely left to the nurse, the doctor not bothering much about it, led one to believe that at least in certain localities, the importance of safeguarding the newborn against at least one condition detrimental to its health, is being overlooked.

It was repeatedly affirmed that not only does successful prevention and treatment of chafing in the newborn concern itself with the treatment of the child locally and generally, but attention must be given to the "treatment" of the mother, the diaper, the nurse, the laundry and even the hospital purchasing agent.

The Child

The child hygiene clinic, or the postnatal clinic should be the source of the bulk of the information that the mother receives in regard to all matters concerning the welfare of her baby. One physician remarked, "Dry babies do not chafe." In many respects this represents the most important statement that can be made on this subject.

Many responses included the advice to use no diapers at night, but to place three or four under the buttocks of the child to absorb moisture and to protect the bed. The use of new diapers before they are properly washed was discouraged. It was suggested that diapers be left open, that is, unpinned, for two hours, three or four times a day, and if excoriation is present, even to dispense with them entirely for a day or two or longer.

Half a hundred replies urged the exposure of the excoriated area to sunlight and air, to the quartz or mercury light or to the warm air from an electric heater. It was repeatedly suggested that the exposure of the irritated area to sunlight, for from ten to twenty minutes every day, is a good practice. The use of the tent bed and an ordinary electric light was urged by some.

Among many excellent suggestions, there appeared some of doubtful expediency, such as the lengthening of the time between feedings, in order to diminish the number of bowel movements, and hence the frequency of the soiling of the child's skin. Rubber sheets in contact with the child's skin, and rubber pantalets were discouraged by all those who mentioned them. One physician observed that, "Rubber pantalets are the product of an effete civilization, by which the mother's time is spared at the expense of the child's skin." And there appears much of wisdom in this somewhat caustic observation.

Many commented on the fact that little trouble from this difficulty is experienced in breast-fed babies, while a half a dozen incriminated a certain proprietary food compound as causing irritative stools. A careful sterilization in a pressure apparatus of all clothing coming in contact with the child's skin, was suggested by not a few. This appears to be a wise precaution for more than one reason, since the frequency, in maternity and children's hospitals, of such contagious conditions as impetigo, is well known.

One of the common causes of dermatitis in the skin area covered by the diaper, is without doubt, an ammoniacal urine or an unduly acid stool. To apply lotions and ointments to a child's skin which is being continually irritated by acid stools, or strongly alkaline urine, is but to treat a symptom, which is decidedly bad therapeutics.

The pediatricians, almost to a man, urged attention to the diet from the standpoint of limiting fats and carbohydrates, respectively, for the above conditions, and in the former, of increasing the orange juice intake, and in the latter, of diluting and making less irritant the child's urine by administering plenty of water. The physicians responding also suggested the administration of some mild medication, such as acid sodium phosphate or sodium bicarbonate to neutralize the alkalinity of the child's urinary output.

Lotions

In so far as the lotions employed in treating or preventing this condition are concerned, it may be said that where the reaction of the child's urine is strongly alkaline, sodium bicarbonate in a 5 per cent solution is often used to cleanse the child's skin which is covered by the diaper. A solution of witch-hazel is also used as a sedative and cleansing application. One of the lotions advised was:

Rx Calamine lotion
Zinc Oxide 10 per cent
Carbolic acid solution 1 per cent.

Bathing

The opinion of those consulted varied greatly in regard to the best procedure to be employed in bathing the child, in so far as protecting its skin against irritation is concerned. It was thought that hard water and soap cause chafing, and water modified by boric acid or ordinary feed bran, was believed by some to be less irritating to the skin than ordinary tap water. Some urged the use of sodium bicarbonate solution, sixty grains to the pint. Others, a boric acid

solution, one tablespoonful to the quart, and others, some favorite lotion. Prescriptions for a number of these will appear below.

It is the routine in some hospitals, when bathing the newborn, to allow but two soap and water baths a week, and to use clear water for this purpose on the other days, with an oil rub twice a day. One physician advised that the child's body, at each diapering, be cleansed with sterile cotton or washed gauze and water, using no soap, and that its skin be dried with cotton flannel, making it a blotting process and not one in which friction is employed.

In a large teaching institution with an active maternity and pediatric service, an experiment has been tried for a year, in which a series of cases have been cleansed with soap and water, and an equal number with olive oil. It was the conclusion in this institution that no difference in skin irritations could be noted between the members of either group. This hospital advises that the baby be bathed with soap and warm water, a soft cloth being employed and but gentle pressure being used.

Castile soap seemed to be the almost standard article used. Many of those to whom inquiry on this point was made, advised the use of cold water or cold 2 per cent boric acid solution for bathing the child's skin which is covered by the diaper, the opinion being expressed that the skin was hardened thereby and made more resistant by using water of this temperature.

In one institution, the following prescription is used in preparing a liquid soap for use in its maternity:

2 cakes of shaved Castile soap,
2 quarts of water,
Boil 20 minutes,
Cool and add 3 ounces of olive oil to the quart.

Powders

Now, it will be noted that in the above description, no mention has been made concerning the use of powders or oils which were salient points in the questionnaire sent out. Recently a comprehensive and informative article on the subject of dusting powders has been written by Dr. Emelyn Coolidge.[1] It is interesting to note that the opinions of those physicians and others consulted, are somewhat at variance with those secured by the questionnaire of THE MODERN HOSPITAL. Indeed, in answer to the fourth query in this letter, not a few listed among the changes in recent years in the practice of protecting babies' skins during the diaper age, the tendency to avoid powders and to rely increasingly on the moderate use of oils or unguents. It is of more than passing interest, therefore, to learn that 168 hospitals and physicians advised against the routine use of talcum or other powders, and ninety-seven use powders of some kind. Thirty-three advised occasional or limited use of powders but did not strongly advocate them.

A physician of the first group stated that he insisted that less powder be used on the baby than the mother used on her own face, and that his rule was that he must never see powder on the child's skin. The efficacy of the first part of this rule, in so far as the protection of the child is concerned, is doubtful.

Powders That Are in Common Use

The powders employed were in the main as follows: rice powder, zinc stearate, burned flour, boric acid, corn starch, bismuth subnitrate with calomel, sodium bicarbonate, lycopodiom powder, zinc oxide powder and fuller's earth. The number of proprietary dusting powders used were in the minority, the reason given for this in a number of instances being the question of cost, and that some were irritant because of impurities and grit, and because the contents of others were not known, (physician's reply). A number of special prescriptions were given, and because of the apparent efficiency of a few of these they will be listed below.

The powder most frequently in use as a preventive to chafing and as a drying agent, is corn starch. This was used because it is non-irritant, could be sterilized, and because of its relative inexpensiveness. Seven used fuller's earth; thirty-three advised zinc stearate; four, burned flour. Zinc oxide powder, rice powder, bismuth subnitrate and sodium bicarbonate are often used.

Special mention should be made here in regard to the use of zinc stearate powder, because of the fact that its danger to the newborn from the standpoint of inhalation has been recognized for some time by physicians. A considerable number of letters contained condemnations, in the strongest terms, of the use of this powder, one physician stating that he had personally supervised the removal of this drug from every closet in his maternity hospital. The American Medical Association has, through a special committee, investigated the danger of insufflation of this powder by children. A special report from this committee was received by the board of trustees of the American Medical Association in June, 1924.[2]

In brief, it was the conclusion of this committee, that no scientific evidence could be found to prove that zinc stearate powders possessed any advantage over other well known powders, that a

great danger lay in dispensing zinc stearate in boxes with removable covers and that it advised covers with outlets controlled by a sliding valve, opened only by firm pressure of the hand of the person using it. This committee reported 131 cases of poisoning, twenty-eight of which terminated fatally. It is decidedly to the credit of manufacturers of this product that on October 31, 1924, a committee, upon which were found representatives of leading pharmaceutical firms, agreed to adopt a self-closing top for zinc stearate containers, to attach precautionary labels to these containers and to carry out any other reasonable recommendations made by the committee of the American Medical Association to which reference has been made.

As to the scientific use of this product, thirty-three leading physicians were requested to state their opinions on this point. Thirty of these believed that zinc stearate was not necessary, and that its use should be discouraged by the medical profession. Two were doubtful, and one stated that he would not care to give it up.

The danger from the standpoint of inhalation of this powder appears to lie in the tendency of children to use as playthings boxes that are carelessly left about their beds, or which are given to them by thoughtless mothers, and to spill the contents of such boxes over their faces. The same result may follow from the careless handling of such containers by older children.

The objections to the use of powders, that were expressed by those answering THE MODERN HOSPITAL questionnaire, largely concern themselves with the belief that powders are inclined to clog the pores of the skin or to assume the shape of an irritating ball when wet, and thus harm the child's skin, and that they too often contain gritty impurities. The successful use of powder, it was stated by others, depends on the ability of the mother to change the child's garments frequently when they are wet. If the child can be kept dry, powders may prevent chafing during the movements of the child in its crib. One orthopedic surgeon stated that he employed borated talcum under his braces to prevent chafing of the skin where the support came into contact with the child's body.

The following special prescriptions for powders were noted in the replies received:

Rx Zinc stearate .....1 part
Talcum .....1 part
Starch .....2 parts
Use as directed.

Rx Zinc stearate .....drams 4
Bismuth subnitrate .....grams 15
Starch .....ounces 1

Rx Equal parts of:
Scorched flour, corn starch, pure talc.

Rx Equal parts of:
Zinc oxide, talcum, boric acid, bismuth subgallate.

Rx Salicylic acid .....grains 4
Pulverized zinc oxide .....drams 4
Pulverized starch and
Pulverized talc.....equal parts to make one ounce.

Rx Calamine, zinc oxide, fuller's earth, bismuth subnitrate, of each.....grains 4

Many hospitals stated that it is their custom to employ powder not as a curative measure but as a preventive one, and that when chafing and other evidences of skin irritation become apparent, their physicians concern themselves largely with seeking the cause, whether dietary or otherwise, and that sunlight and the removal of the diaper, with soothing alkaline or other lotions, are the treatments given.

Oils

Some interesting information was secured in the answers to the question as to the use of oils, creams and so forth. Thirty-four stated that no oils or creams are used in their institutions or practices. Approximately a dozen use neither oils nor powders.

The use of oils was urged by a number of those answering this inquiry because they were thought to serve as a natural protection to the child's skin against moisture, and because the skin often became too dry and required some such medication. A few urged the use of oils because of their nourishing qualities, in so far as the skin is concerned, which recalls a recent statement by a dermatologist, that skin foods are of no more value to the skin, from the standpoint of nourishment to the skin than oats rubbed on the horse's stomach would be to his general nutrition. In one reply (that of a nurse) it was stated that vegetable oils are best because they soften, while mineral oils harden the skin and thus cause chafing.

From a statistical standpoint, 106 hospitals and physicians stated that they rely entirely upon olive oil to meet the above indications, as well as representing a substitute for water in cleansing. Eight gave it as an alternative for some other of the oils. One uses a combination of olive oil with milk of magnesia. Another combines it with zinc oxide ointment. Another employs as a skin application, equal parts of olive oil and lime water after each bowel movement, and another uses olive oil only at birth, and not afterwards. Some ingenious and no doubt efficacious oily prepara-

tions are also employed. In one institution, lamb tallow, prepared in the following way, is used:

Lamb suet, free from salt, is purchased at a local butcher shop, and the oil is tried out in a low heated oven. The superintendent advising this oil, stated that it is non-irritant and has the added virtues of being inexpensive and easy to obtain.

How Oils Are Combined

Four of the 290 persons questioned, use castor oil alone on the skin, and two use this oil as an alternative to olive or mineral oil, no preference being stated. A combination of castor oil with zinc oxide ointment appeared rather popular, twelve institutions employing this preparation. One hospital uses castor oil with zinc stearate. One combines it with bismuth subnitrate and one with burned flour. One uses equal parts of balsam of Peru and castor oil. Nineteen apply mineral oil to the child's skin as a preventive and curative measure, and one expressed the opinion that mineral oil and olive oil are of equal virtue. It was frequently stated that mineral oil possesses the advantage over others in not becoming rancid, as does lanolin, for example. Vaseline was given as the first choice by ten, and four expressed the belief that lanolin, olive oil and cotton-seed oil are equally useful. Nineteen employ zinc oxide ointment where excoriation exists, and three use zinc oxide ointment or ammoniated mercury, or zinc stearate ointment. Two combine vaseline and zinc oxide ointment in equal parts. Eighteen believed that cotton-seed oil has an advantage over others, while three use either cotton-seed oil, olive oil or mineral oil. Three combine cotton-seed oil and lime water in equal parts, the belief being stated that the oil cleanses and the lime water neutralizes acid stools. Two per cent ammoniated mercury was preferred by four and twelve stated that liquid albolene is their choice. Five reported that they alternate liquid albolene with mineral oil, and five use sweet oil, two parts, and lime water, one part, at each diapering. Other oil preparations were employed in lesser frequency, lanolin being preferred by five, benzoated lard by five, boric acid ointment by eleven, cold cream by six and cocoa butter by five. Carron oil is used by two hospital superintendents, who expressed the belief that it is useful in protecting the child against scalding acid stools. Almond oil was advocated by one.

A number of physicians and hospitals set down a combination of the above simple ingredients as exceeding in value any single oil or ointment. A few of these combinations will be given as illustrating these preferences:

Rx Balsam Peru .....2 drams
Precipitated sulphur .....2 drams
Lassar's paste to make 6 ounces.

Rx Starch .....2 drams
White petrolatum to make one ounce.

Rx Zinc ointment thinned with liquid petrolatum to make a smooth paste.

Rx Zinc ointment and castor oil to make a paste.

Rx Cotton-seed oil and lime water, equal parts.

Rx Castor oil and fuller's earth to make a paste.

Rx Equal parts of castor oil and zinc oxide.

Rx Boric acid ointment and zinc oxide ointment, equal parts, with a little oil of rose for its odor.

Sufficient has been said above to convey the information that the use of oils and powders, in the prevention and treatment of chafing in children, is almost as varied in so far as any individual ingredient is concerned, as the tastes and clienteles of the physicians and hospitals making these reports. The reader can judge of the efficacy of these preparations by his own experiences and by the relative frequency with which they are employed.

May Treat Diaper

It has been intimated that not only is it necessary to treat the child, but also to seek for causes of this difficulty from without. One physician to whom the questionnaire was sent advised treating the diaper and not the baby. An informative and carefully prepared article covering this phase of the problem has recently appeared in the medical literature under the signature of Dr. Jean V. Cooke, St. Louis.[3] Doctor Cooke states that the irritation of the skin of children, appearing in the area covered by the diaper, is caused by decomposition of the urea in the child's urine, and the splitting off of ammonia. The "ammoniacal diaper" is blamed for the irritant effect upon the child's skin. The conclusion which Doctor Cooke draws has been substantiated by pediatricians everywhere, and the sterilization of the diaper by means of antiseptics has proved a most efficacious means of preventing skin irritation. Briefly, the technique employed is as follows:

The diapers are thoroughly washed and after several rinsings in plain water are finally rinsed in a 1-4000 solution of mercuric chlorid. This solution can be prepared by dissolving one seven and one-half grain bichlorid of mercury tablet in two quarts of water. The diapers are then wrung thoroughly and allowed to dry. Doctor Cooke states that, "Ordinary diapers, even when wrung

thoroughly, retain from three to five ounces of the fluid. When dried, they are difusely pregnated with the bichlorid and when later wet by urine the dissolved antiseptic prevents bacterial growth and ammonia formation. With the elimination of the cause, the skin irritation disappears rapidly. Indeed, so effective is the treatment outlined, that when the ammoniacal odor persists, and skin lotions do not heal rapidly, one can be certain that the instructions regarding napkins have not been faithfully observed."

To the writer, the one objection to this method appears to be the danger of poisoning from bichlorid of mercury. If the hospital or physician desires to be entirely free from such a danger, boracic acid may be used. Indeed, this drug is rather popular among physicians and hospitals, and is often used as a substitute for bichlorid of mercury in sterilizing the child's diaper. If boracic acid is to be used, it may be employed in saturated solution, and in much the same manner as the mercuric chlorid is employed. The diaper, after being thoroughly washed and rinsed, should be immersed in this solution and hung on the line and dried in the sun. The dry powder should not be removed by shaking, and the diaper may then be applied with reasonable certainty that the growth of saprophytic bacteria will be efficiently checked.

Mother's Diet Is Important

In the answers received by THE MODERN HOSPITAL, attention was frequently directed to the fact that the diet of the mother should be rather carefully inspected when signs of skin irritation are detected in the child. Certain fruits, such as grapes, strawberries, and undigestible foods generally, as well as errors in the personal hygiene of the mother, are said to be capable of producing a deleterious effect, through the mother's milk, on the child. Advice of the proper sort can be transmitted to the mother through the channel of the postnatal clinic.

In order to aid mothers in properly caring for the baby's skin, one hospital has arranged with a local drug store to prepare and sell at a reasonable rate, a special tray containing the solutions and other medicaments advised by the institution's staff. A printed list of instructions in regard to the use of this equipment, and as to general matters affecting the child's health, accompanies this outfit.

In regard to "treating" the laundry, one superintendent stated that when she noted that the skin of children in the maternity was showing signs of irritation, she immediately proceeded to the institutional laundry in search of the cause.

The reviewer was somewhat surprised to note the infrequency with which the burnable diaper was employed throughout the country's hospitals. In one institution a diaper that is made from gauze, absorbent paper and cotton, is in use. These diapers cost approximately three cents each, are made in this particular institution and are burned when soiled. This diaper is of special use where there is improper washing or where the problem of washing is so great that sufficient speed cannot be secured to maintain at all times an adequate supply, or where special precautions relative to the spread of vaginitis are desirable.

Conclusions

There is no uniformity in belief as to the use of oils and powders in the prevention and treatment of chafing in children of the diaper age.

There appears to be an increase in the use of oils and a decline in the frequency with which powders are employed for the above purposes.

Attention to the child's diet, and an increase in the practice of insisting that children be breast-fed whenever possible, are being stressed as a means of preventing irritation and excoriation of the skin in children of the diaper age.

Olive oil appears to lead in hospital and physicians' practice as a means of preventing skin irritation in the newborn.

A rather general recognition of the danger of zinc stearate as a dusting powder and an uncertainty in the minds of many as to its necessity in hospital practice is noted. A great advance in the treatment of ammoniacal dermatitis has been made by the adoption of principles of antisepsis in the preparation of the child's diapers.

The value of cleanliness and sunshine, and of artificial heliotherapy, in preventing skin irritation in children of the diaper age as expressed in the opinions of the 290 persons interviewed, is perhaps the most important recommendation secured by means of this questionnaire.

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[1] Emelyn Coolidge, M.D., Archiv. of Pediatrics, Sept., 1926.
[2] Journal A. M. A. 84-10, 750-751, March 7, 1925.
[3] J. V. Cooke (Jacquet Dermatitis) Archiv. Dermat. and Syphilology 14:539-546, November, 1926.
J. V. Cooke (Etiology and Treatment of Ammoniacal Dermatitis of the Gluteal Region of Infants).—Amer. Jour. Dis. Child. 22:481, November, 1921.

HELP IN HANDLING MATTRESSES

Because of their weight and bulkiness, mattresses are difficult to handle. The tugging and twisting that is necessary to move them results in much wear and tear which shortens the life of the mattress.

This can be minimized by a simple plan that has been found practical in an Indiana hospital. Canvas strap handles are sewn on each of the sides, each handle being about an arm's length from the other. This makes it easy for one person to turn the mattress around or over.

Editorials

YOUR MAGAZINE AND YOU

TWELVE times each year there comes to your desk a magazine with the now familiar cover of THE MODERN HOSPITAL.

What are your thoughts as you open its covers? Do you welcome its arrival with a feeling of confidence that you will find therein information that will enable you to render better service to the sick in your institution? Do you turn first to any particular department which has proven helpful to you? Is this help constant and practical?

Do you sense a personal understanding and an interested tone in its articles on hospital matters? Or, do you feel that there exists between you and it a gap of impersonality which is difficult for you to cross?

Just as you would informally ask a chance-met fellow executive for his opinion, do you feel free to request a discussion in its pages of some individual problem that is disturbing you?

In brief, is THE MODERN HOSPITAL fulfilling your conception of what a hospital magazine should mean to its field? Is it "just another journal" to you? Or is it your magazine, because it supplies practical information that aids you in solving your everyday problems, reviews current progress in hospital work in an interesting manner, furnishes you with inspiration and thus serves to lighten your day's work?

The editors earnestly desire to know just how you regard this magazine. They are asking you these questions because they consider you an important part of this publication—important because every number is planned with one, and only one, purpose in view—to render the greatest possible amount of service to you and to your hospital.

Let us state our aims and our conception of what you have a right to expect from THE MODERN HOSPITAL:

An honest endeavor is made to select everything that is published in each issue—from the picture on the front cover to the advertisement on the last page of the magazine—from the viewpoint of the hospital executive.

To this end, the attempt is made to assume the mental attitude of one superintendent talking to another, one department head relating his experiences; one manufacturer giving an honest estimate of his product.

THE MODERN HOSPITAL tries to build into each page—whether it be devoted to advertising or to the description of some procedure intimately concerned with treating the patient—the ideal of service to the sick.

It strives to give its readers a mental stimulus and to suggest to them ideals that may lift their spirits above the mere physical details of "running" a hospital, to that higher plane where fatigue and misunderstanding, discouragement and human frailty are submerged in the joy of doing to others as you would be done by.

It aims to come close, very close, to the superintendent in advising him how to solve the minor but annoying details of each day's work. It wishes to be his office assistant, his confidant, his trusted friend.

It seeks to deal with the discussion of great matters of policy, not from the angle of any one type or size of hospital but from a broad standpoint. It tries to speak on such subjects with intelligent practicality.

It strives to be a conservative but forward-looking leader in suggesting newer and better methods in hospital construction and administration. It fearlessly commends the good as it sees it in hospital practice, and just as certainly it condemns the adoption of methods and policies that appear detrimental to the patient's welfare.

It works to advance in every way the proper education of the intern and the nurse.

It endeavors to become an institution, the foundation of which rests on the rendition of service to every one of the more than seven thousand members of its family.

Does THE MODERN HOSPITAL mean this to you? If not, will you aid the editors in making it a more useful instrument in improving the care of the nation's sick, by giving them the benefit of your constructive criticism, in their endeavor to raise high the standard of hospital efficiency?

HOSPITALS AND HEALTH IN THE FLOOD AREA

ALL the water from an unprecedented rainfall over a vast catchment area crowded into a single channel—seventy-one counties in seven states flooded—750,000 people in this devasted area—crops destroyed—homes wrecked—live stock drowned—roads uptorn—everything but the mortgage washed away—these are the high lights of the recent Mississippi floods.

The Red Cross, the Public Health Service, the state and county health forces and the national volunteer health organizations in mobilization—rescue, housing, feeding, sanitary and medical

problems to be solved—these complicated the situation. Schools turned into hospitals, the blackboards serving as clinical charts—nurses, physicians, dentists, sanitarians rushing in generously to succor—wholesale smallpox and antityphoid vaccinations—sanitary indoctrination by example—these were the responses of the national hospital and health world.

The first phase has been met; the evicted are returning to scratch a few seeds into their soggy fields, to cope with malaria, dysentery, typhoid fever, malnutrition and fatigue. This will require eighteen months during which health protection and hospital service must surround and protect these unfortunates.

The problem is not local; it is national. It places the hospital profession on trial. If it is to discharge its self-assumed duty to community health and relief, it must act now. The national hospital organizations and similar groups must formulate a program of gratuitous assistance to rehabilitate and rebuild the hospitals and clinics of the stricken zone. They should not wait to be asked to do this; they should volunteer their expert aid. This is an opportunity to bring blessings out of disaster and to exemplify adherence to the ideals of hospital medicine.

THE SPECIALIST AND THE HOSPITAL

IN A recent number of *The Journal of the American Medical Association*, Dr. S. S. Goldwater presented a characteristically thoughtful discussion of medical specialism as it affects the hospital, present and future.

Dr. Goldwater's comments on what he has termed "the isolation—the clinical loneliness of some specialists—" are refreshingly blunt and plain-spoken.

Thinking physicians have on numerous occasions deplored the tendency of modern specialism to view ailing humanity through diagnostic and therapeutic lenses of such high power that but a limited understanding is secured of the patient's many-sided social and medical background.

The jocose and supercritical—*reductio ad absurdum*—have spoken of physicians skilled in treating the right but not the left nasal chamber.

General physical diagnosis is not a subject in which many of the regional specialists excel, and it is undoubtedly true that if one needed to secure a stethoscope promptly one would hardly expect to succeed if the appeal were of necessity made to some specialists.

Furthermore, a discouraging phase of the situation is the relative insouciance that is observed in regard to this lack of knowledge as to the functioning of organs adjacent to those best known by the particular specialist.

But whether specialism is guilty of all the misdeeds placed upon its doorstep (and it certainly is not, for as Dr. Goldwater points out, medicine owes much to the brilliant intellects of many of its representatives) appears not of so great importance to the hospital executive as do the problems of providing its members institutional working space and adequate instruments.

Dr. Goldwater touches on a vital point when he emphasizes the difficulty of coordinating the efforts of numerous, specially housed specialty groups, in so far as producing a concerted hospital effort in the patient's behalf is concerned.

There is certainly a limit to the number and variety of beds that it is possible to administer efficiently. There is also a likelihood that specialized knowledge may be so subdivided among many physicians, that, like a picture puzzle, its parts cannot all be easily assembled to complete the panorama of the patient's past history and his present treatment.

Hence it is questionable whether the interests of the average patient are not more secure in the hands of a well trained internist or general surgeon, who is able to recognize the rare and unusual, and is informed as to where to secure specialty advice promptly, if it is needed, than in the hands of a half-dozen physicians of more intensified but narrowed medical interests.

The administrator of the average general hospital knows how difficult it is routinely and promptly to secure responses to consultation requests. Indeed, a solo consultation is often the result of this effort, instead of the expected duet or trio.

The over-developed medical center, therefore, with millions of dollars invested in construction and endowment, and with its complicated organization of associated specialty institutions, often presents such a maze of administrative difficulties—such a physical and hence clinical separation of patients—that the business of treating their interrelated ailments falters because of the lack of timely and efficient unified direction.

There must be an ultimate, in so far as the patient's welfare is concerned, in the size of hospitals and in the number of beds assigned to the specialized groups of physicians working therein. Perhaps this limit will be determined by the inability of the sick man to pay for the services of too many doctors; perhaps by demand of the public for a more simplified, more effective and hence less costly administration of hospitals.

At any rate, the well organized general hospital

of four, five or six hundred beds appears now to be the logical situation in which most efficiently to coordinate the efforts of the general surgeon and internist with those of the laryngologist, the metabolist, the cardiologist and other groups professing specialized medical knowledge.

Dr. Goldwater's article is a valuable contribution to the study of this basic problem in hospital administration, and appearing in a medical journal it ought to command the thoughtful consideration of clinicians, whose understanding of the problem is requisite to its solution.

TALKING IT OVER

HAVE you ever noticed in a hospital annual report how comparatively vacant is the column set aside for recording the number of patients who were actually cured during the year? This fact may reflect either modesty or caution on the part of the person making up the record, or it may reveal a faulty, careless system of estimating the result of treatment. On the other hand, it is more likely to be nearer the truth to admit that while symptomatic relief is common, actual pathologic cures, as a result of the physician's effort, take place much less frequently. Thanks to the fact that Nature has so constructed the human body, much functioning tissue can be destroyed by disease without seriously disturbing the vital processes. As a result, symptomatic relief is often mistaken for a pathologic cure.

If to cure completely is so difficult, and, hence, so occasional, prevention of damage to heart, kidney, or lung tissue becomes of supreme importance. Does your hospital possess a cardiac or chest clinic, which aims to preserve before disease comes, as well as to restore function to flagging hearts or ailing respiratory organs?

* * *

THE fact that physiotherapy pays dividends is shown in a recent report from the National Leper's Home, Carville, La. As is well known, deformities of the hands and feet are of common occurrence in leprosy. Contrast and whirlpool baths, massage, active and passive exercises on pendulum machines, faradic and galvanic current, radiant and deep therapy light, ultraviolet ray and diathermy have been used on these unfortunates. Many deformities were greatly improved and possibly cured. Physiotherapy proved very successful in the prevention of many of the deformities of leprosy.

* * *

THERE is a type of executive who is perhaps the greatest of all deterrents to progress. This is the "can't-be-doner." This sort of person has gradually accumulated a set of precedents against doing this, that or the other. He has learned, perhaps by bitter experience, that to follow a given policy is dangerous or unwise. When an apparently similar situation arises he at once says, "It can't be done." Inhibitions grow up about him until he is encased in as many walls as China, and eventually they become so high that he cannot see over the top. He considers himself a wise conservative and indulges in self-congratulation because he makes no mistakes. In every situation he sees a ghost around the corner. These increase in number until he makes Conan Doyle and Oliver Lodge look like amateurs. Eventually, he reaches a point where he never moves forward because he is too busy dodging shadows. He is indefatigable in searching out reasons against every course of action; only that which has always been is safe; every turn in the road leads to a bottomless abyss. He is the foe of action, the enemy of change and the apostle of dry-rot. Finally, some active live-wire who isn't afraid of the mistake bogey comes along and shoves him out of his seat. Then the plant begins to move.

* * *

HAVE you heard about the clothes washing attachment for vehicles? This consists of a covered box balanced on the central pivot that is attached to the running board of an automobile of the Lizzie type. At each end of the box are springs. In the morning the box is filled with soap, water and soiled clothes, the cover is clamped in place. Off you go. Every time you hit a bump in the road the machine rocks. The more the automobile shivers, vibrates, shakes and shimmies the more the clothes are agitated and the sooner is the washing completed. On arrival at the destination, the suds are drained off, the clothes are rinsed, wrung out and hung in the sun to dry. Marvellous! but how much better it would have been to send them to the laundry. There are a lot of us in this world who go to considerable trouble, thought and expense to evolve methods of doing things, while right at hand there is an obvious, practical method of accomplishing them.

* * *

OTHER people besides ourselves are beginning to take seriously the function of hospitals in health education. Dr. O. Khoor, in the biweekly public health journal of the Hungarian Ministry of Public Welfare, Budapest, relates his experiences during the last year in a women's ward. Fifty-three lectures were given. They were in popular and easily understood language and concerned themselves with the anatomy and physiology of the female generative organs, and details regarding the hygiene of pregnancy and of children and the avoidance of cancer and tuberculosis. The lectures were given by an intelligent nurse who was specially trained for the purpose. They met with great success because in a hospital, the author believes, patients gladly avail themselves of anything that will afford diversion and instruction. Dr. Khoor supplemented these lectures with little informal talks which he believes brought good results, because sick people are apt to have a great deal of confidence in their physicians and to pay close attention to every word uttered by them.

* * *

HOW many "Yesers" have you on your administrative staff? Perhaps it would be best to explain that a man or woman who always agrees with his or her superior officer has been called a "Yeser." It has been said that progress usually results from a conflict of intelligent opinions, and that friction of this sort may polish an issue. Some executives do not relish their assistants' disagreeing with them on matters under discussion. Others welcome divergent opinions, because they serve either to confirm their own, or to suggest considerations hitherto unthought of.

Let us not then, as superintendents, fail to appreciate the men and women in our organizations who are honest, intelligent, and brave enough to express an opinion frankly, even though it is contrary to our own.

The Modern Hospital Reading Course: Lesson VII

ADMINISTRATIVE ORGANIZATION AND POLICY

By Edgar C. Hayhow, B.C.S., Superintendent, New Rochelle Hospital,
New Rochelle, N. Y.

THE chapters so far presented in this course have set up the various medical and social needs of hospitals in general—the problem of disease; the development of a rational plan of hospitalization; the necessity for community interest in the hospital.

Our next step must be careful study of the internal organization of the institution, first by formulating a definite plan embodying the managerial policies and procedures, and second, by organizing a personnel to administer these policies.

An analysis of the management of industrial endeavors reveals the fact that careful definition of policy clarifies the integral functions of any business, and that clearly outlined rules of procedure are a valuable guide in the management of commercial affairs. It is, rightly, the practice of most hospitals to print pamphlets of by-laws and rules and regulations. The reader is recommended to make a careful study of established systems. It is important to visualize the organization of the hospital by schematic charts. Such charts illustrate the exact route by which the authority vested in the board of trustees proceeds through superintendent and department head to the nurse, the clerk, the engine room stoker and the scrub-woman. By courtesy of Frank E. Chapman, director, Mount Sinai Hospital, Cleveland, there are here reproduced some organization charts to illustrate this point.

What is the practical value of such charts? They present at a glance a clear picture of the entire organization; they set up definite lines of demarcation for departmental activities; they prevent interference in the functions of the various departments; they establish lines of functional authority.

Further reference to Chapman's "Hospital Organization and Operation" is recommended, inasmuch as undesirable forms of organization are illustrated and constructively criticized there.

Who should be chosen as trustees of a hospital and what are the duties of this group?

The board of trustees should be representative of the community and should include persons capable of representing the commercial, professional, social, civic, and educational fields. Bankers, lawyers, engineers, business men, educators, and, in non-sectarian hospitals, representatives of various religious groups are desirable members. This manifold representation of various interests will promote wise guidance of hospital policies. The board is definitely responsible to the community for the management of the hospital, and must satisfy itself that the internal management represents as economical and efficient an organization as possible, and that the best interests of the community that supports the hospital are being served.

It is not necessary to define the duties of each committee of the board; suffice it to say that careful thought should be given to the selection of committee members. The personnel of the executive committee should be formed of the chairmen of all other committees. Often the vice-president is chairman. The superintendent should attend all meetings.

Other committees of the board should function in accordance with their assignments. In no instance, however, should they have administrative powers. Their reports should be made to the board and should not be carried out until confirmed thereby. The procedures recommended should be referred to the superintendent for fulfillment.

The superintendent should function immediately under this executive group and should be responsible to them. It is not good management to present minor problems to the attention of the full directorate as these questions usually result in much roundabout discussion, often with-

Review Work

What are the advantages of organization charts?

Outline qualifications for membership on a board of trustees.

What is a "job specification"?

List the advantages of group conferences.

What subjects are discussed at group conferences?

What information should be given the superintendent each morning by the department heads?

out definite action being taken. Important questions involving changes in policies, enlargement of facilities, and needs for appropriations will usually amply occupy the attention at board meetings. Minor matters should be decided by the executive committee and approved, usually as a purely routine matter, at the next board meeting.

The superintendent as executive officer of the hospital is in specific charge of the management of the hospital and, as the authorized agent of the board of trustees, is the paid official for administration of policies, rules, and instructions dictated by the board.

What should his qualifications be? Few positions bring the incumbent into contact with so many and diverse problems. The relative value to a superintendent of knowledge of the various subjects is, of course, debatable. The percentages as enumerated in the Rockefeller Foundation report for a curriculum of training hospital executives is interesting:

Public health 20 per cent.
Social sciences 15 per cent.
Organization 15 per cent.
Hospital function and history 10 per cent.
Business science 10 per cent.
Institutional management 10 per cent.
Personal administration 5 per cent.
Community hospital need 5 per cent.
Physical need 5 per cent.
Jurisprudence 5 per cent.

Detailed discussion of qualifications of superintendents is irrelevant. The best men and women in hospital administration today have gained their skill by apprenticeship and experience. Medical, nursing or social welfare training without knowledge of business science, is of little avail and vice versa. Suffice it to say that the establishment of training courses in hospital administration for persons with sufficient basic qualifications, cannot but result in wiser, more economical, and more effective operation of our hospitals.

Issuance of Orders

There is perhaps nothing as helpful in hospital management in the discharge of routine duties as rules carefully thought out and expressed in typewritten form. Copies of new rules must be sent to all department heads concerned. Uniform size loose-leaf paper may be used. A special loose-leaf cover should be provided for each department head for preservation of the rules pertaining to his work. The superintendent's book will contain copies of all. The recipients of a house order should initial a receipt which is presented by the messenger delivering the orders. This receipt is filed with the superintendent's copy of the order.

Sample House Order

No. 11 Date _____

Subject: *Holidays*

The following holidays will be observed by the hospital. On these dates the department heads are authorized to maintain a Sunday schedule unless some special condition may make longer hours necessary:

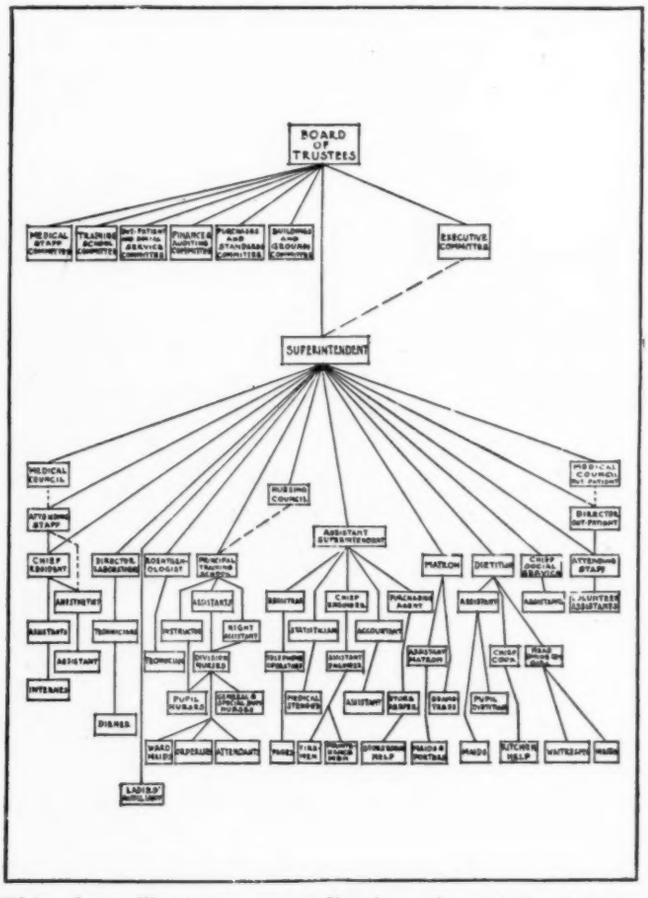
January 1st—New Year's Day.
February 12th—Lincoln's Birthday.
February 22nd—Washington's Birthday.
May 30th—Memorial Day.
July 4th—Independence Day.
Labor Day.
Thanksgiving Day.
December 25th—Christmas.

In case holidays fall on Sunday the following Monday will be observed unless contrary notice is given.

JOHN DOE, M.D.,
Superintendent.

Copy sent to all department heads.

A departmental or job analysis is a written specification of any one department or job. It clearly enumerates every important function, listing the personnel and the function expected of each unit of endeavor, as well as all rules and



This chart illustrates centralization of control with the division of departmental responsibility on a basis of actual performance of various activities.

instructions in force concerning the department or job.

When adopting this policy each job should be thoroughly discussed with the department head; units of employment should be established as individual performances and a chart should be prepared showing lines of specific operation and authority. There cannot then arise the question of divided responsibility or the infringement of each other's duties. An official copy of all these procedures should be in a permanent file in the superintendent's office, each department head being supplied with a copy of the part applying to his division of the work.

The principal responsibility of the superintendent is the guidance of general activities and the adjustment of inter-departmental difficulties. If a job analysis has been established for the minor positions, the superintendent is not often required personally to decide inter-departmental questions. He cannot handle the minute details of departmental management and do justice to the broad and vital problems of the institution as a whole. The head of each department should be vested with sufficient authority to manage his department. Needless to say, that authority must be backed up by the superintendent.

Department Head Conferences

Much of every executive's time is spent in coordinating the personalities of his professional and lay staff. Minor difficulties are constantly arising, due to misunderstanding of rules and procedures, and in no little degree, perhaps, to lack of forethought. How can this waste of energy be prevented without sacrificing efficient management, reduced turnover, or contented personnel? Modern business accepts the value of the board of arbitration, the group conference, and the organized training of personnel. Businesslike hospitals will use similar methods with successful results.

How can the group conference plan apply to hospitals? The question may be answered as follows:

Q. Who comprises the personnel of a hospital group conference?

A. The superintendent and the heads of departments.

Q. How is it organized?

A. The superintendent acts as chairman and appoints a secretary.

Q. What is the purpose of the conference system?

A. To discuss intimately the general affairs of the hospital; to coordinate ideas for better service; to settle differences in internal management; to discuss methods of reducing costs and any other matter referred to the convening group.

Q. When are the conferences held?

A. Any time, usually weekly or monthly at the request of the executive officer.

Q. What definite good is accomplished?

A. Misunderstandings are stated, discussed and settled at one time by one person in the presence of all people concerned, which logically tends to a better esprit de corps.

Q. What questions are discussed?

A. All matters needing attention, new policies, new plans, administrative organization, personnel methods, financial reports and superintendent's summary of past month's activities. The following matters are samples of the many topics that may be encountered:

(a) Interdepartmental cooperation.
(b) Filling of requisitions.
(c) Completion repair requisitions.
(d) Food for patients and staff.
(e) High pressure steam supply.
(f) Linen distribution.
(g) Telephone service.

All these questions are pertinent. An institution that can function for long without such problems arising is purely imaginary.

The writer is familiar with several hospitals rotating their department heads as monthly acting chairmen of the administrative conference. During the month this person makes a thorough survey and study of the entire plant with constructive recommendations.

It is not good management for the superintendent to make arbitrary decisions without offering any explanation. Many a splendid system has failed to work because of a lack of sympathy and cooperation. Department heads are not automatons and no system will work out well if the clerk in charge of the mechanics of the system does not thoroughly understand and appreciate what it is all about.

Can a definite ratio of hospital employees to available hospital beds be established? Can actual bed capacity arbitrarily regulate a job specification, irrespective of locality, type of hospital or kind of service rendered? Affirmative answer would be absurd. Theoretical ratios are available and we should accept them as standards, considering it necessary to prove to ourselves and our trustees that any deviation from the established ratio is sound as pertaining to the individual institution. Every hospital is confronted with seasonal peak loads and must be manned accordingly.

Weber[4] has outlined for us the necessary personnel for various sized hospitals. Again, any arbitrary number of employees for a stated number of beds would be academic, but it serves as a guide for comparative studies. Let us take, for example, the ratio of nurses to patients treated. Five main points must be considered in connection with the number of nurses to be employed:

1. Type of hospital (general, special, or chronic).

2. Type of hospital plan (location of rooms, wards, and accessibility of coordinated medical units).

3. Ratio of private, semi-private and ward patients.

4. Service to patients.

5. Whether or not there is a training school.

The departments of any hospital of reasonable size can be classified, as follows: administrative; nursing; dietetic; housekeeping; laboratories;

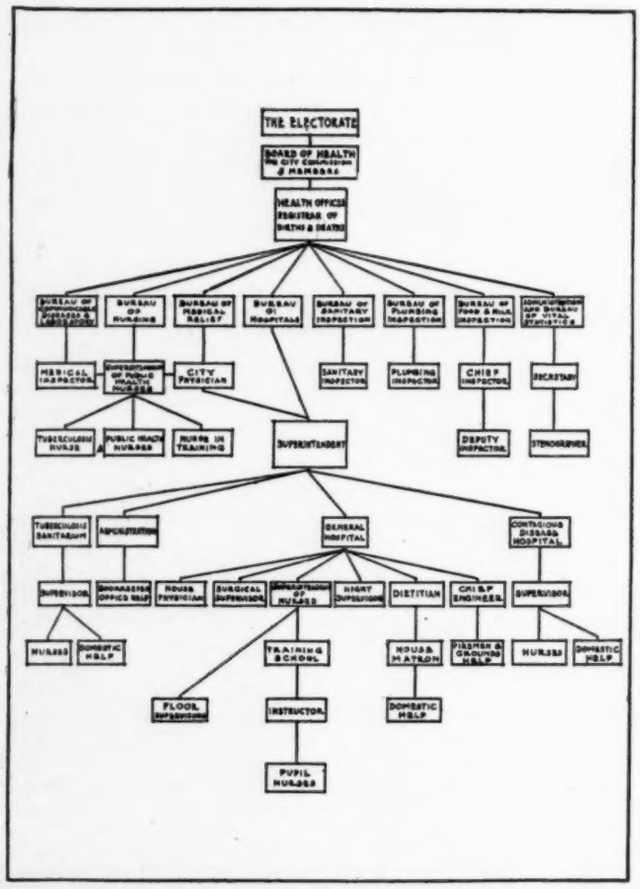


Chart of organization of the health activity of a community, carried to a conclusion only insofar as the hospital phase of the activity is concerned.

pharmacy; training school; steward; engineering.

In smaller institutions there must be of necessity a combination of endeavors, and the organization charts will determine the general department functions. The smaller hospitals combine the superintendent with the director of nurses and purchasing agent. One person often acts both as housekeeper and dietitian. A hospital of 100 beds will, perhaps, combine the assistant superintendent with the auditor and purchasing agent. The engineer is the electrician, plumber and handyman, and calls on outside skill for unusual repairs to the boiler room and engineering equipment. The admitting clerk can also act as relief telephone operator. The registrar of the dispensary might be in charge of the social service department. Often the x-ray technician assumes the duties of a pharmacist.

It must be remembered that divided responsibility is often unfavorable to efficient management. The person with many responsibilities will evade necessary work in one department, giving as an excuse the added work of another job.

The superintendent must keep his finger upon the pulse of his organization. He should require a daily census from department heads of personnel on duty, those absent from the department, and those sick in the institution and he should be notified of any unusual occurrences. He should also be supplied periodically with a log from each department, stating the performance of that department. Outlines of the logs of several departments follow:

The Admission Office

Daily census of previous twenty-four hours.
Number of admissions according to full-pay, part-pay, and free compensation and city cases.
Number of admissions according to discharges, transfers, and deaths, private, semi-private, and ward.
Report of waiting list.
Report of accidents (admitted and not admitted).
Report of ambulance calls.

Bookkeeper

Total receipts including donations.
Total charges to patients.
Bank balances.
Total disbursements.
Report of petty cash.
Report of pay roll.
Monthly financial report in detail.
(This report will be discussed in detail in a later issue.)

X-ray

Number of cases treated.
Number of plates used.
(This report should show private, semi-private, dispensary, accidents and outside cases).

Dietitian

Number of meals served (patients, employees).
Number of special diets.
Monthly reports of per capita costs.
(a) Unit meal cost.
(b) Total food cost.

Nursing

Report of operations.
Report of all critically ill patients.
Report of any unusual condition concerning patients, of interest to the superintendent.
Number of nurses on duty.
(a) Supervisors.
(b) Graduates.
(c) Undergraduates.
(d) Students.
(e) Number of affiliates.
(f) Number absent from training school.
(g) Number of special nurses.

Engineer

Report of all maintenance repairs.
Report of all capital installations.

Amount of coal received.
Amount of coal used.
Charts of steam gauges and night watchman's clock.

Housekeeper

General report of housekeeping work.
Number of employees on duty.
Report of laundry and linen rooms.

Dispensary

Number of new cases in each department.
Number of re-visits in each department.
Report as to time and attendance of medical staffs.
Number of patients admitted to hospital.
Number of patients referred from hospital
Number of follow-up cases referred to social service.

A special file in the superintendent's office should contain all job analyses and each department head should be supplied with individual copies. New department heads find it a comparatively easy matter to learn their duties by consulting the analysis.

Superintendent's Duties and Powers

It seems appropriate here to give a detailed analysis of the superintendent's job as outlined for one hospital. It should be borne in mind that for this important position any analysis will be but a minimum standard.

The superintendent, as executive head of the hospital, is the representative of the board of governors and is subject to their authority and that of the executive committee.

He shall have charge of the hospital and all the premises and shall see that all rules and regulations are carried into effect.

He shall admit all patients, subject to the rules and orders of the executive committee. He shall discharge, as soon as practicable, all patients recommended for discharge by the attending staff, and may, with the approval of the president of the medical board, discharge any patient for misconduct. All such cases must be reported promptly to the executive committee.

He shall keep, or cause to be kept, for the inspection of the executive committee, a record of the name, age, residence and employment of each patient, and the date and terms of admission, date of discharge, elopement or death, result of treatment, and disposition of remains, in case of death, with such remarks as may be requested by the medical board.

He shall report monthly to the medical board the names of all patients who have been in the hospital twenty-five days or more, together with the names of physicians in charge; and shall make to the executive committee a similar report of all patients who have been in the hospital forty or more days.

He shall keep an inventory of all furniture and other property belonging to the hospital.

He shall supervise all expenditures and cause proper records to be made of the same.

He shall deposit with the treasurer all hospital monies received, and shall draw a draft signed by two members of the executive committee, upon the treasurer, for such sums as may, from time to time, be required for the use of the hospital. He shall cause to be kept in books provided for that purpose a regular and accurate account of all monies received or disbursed by himself on behalf of the hospital, which books, with the vouchers, shall be open for inspection at any time by any member of the board of governors. He shall open a bank account in such bank or trust company as shall be designated by the board of governors, in which all monies received by him from the treasurer shall be deposited. All checks or drafts on such account shall be countersigned by the head bookkeeper or other person designated by the executive committee.

He shall provide the special diet for patients, as may be directed by the physicians, and the general diet for patients and all persons employed in the hospital.

He shall visit and inspect daily the wards, kitchen, laundry, and all other departments of the hospital.

He shall have power to engage and dismiss all employees of the hospital, subject to the approval of the executive committee. He shall dismiss all employees who shall be guilty of profanity, drunkenness, bringing spirituous liquors clandestinely into the hospital, or other gross misconduct, and shall report such dismissals to the executive committee without delay.

He shall take particular care that no wines, spirits, or malt liquors be used in the hospital, except as prescribed for the patients.

He shall permit no persons, excepting those who in his judgment are entitled so to do, to take their meals or to sleep in the hospital, or occupy any part of the premises without express permission of the executive committee.

He shall, under the direction of the executive committee, purchase all supplies required by the hospital, and shall attend to the proper issue of the same, keeping under key wines, spirits, stores and other household articles.

Superintendent Keeps Record of Contracts

He shall keep a record of all such contracts as he may be authorized to make, which record shall be laid before the executive committee.

He shall report to the executive committee such ordinary repairs to the buildings and other property as may from time to time be needed, and shall act under their instructions in regard to

the same and see that their directions are observed as to the care of the property of the hospital.

He shall see that the instructions of the physicians in regard to temperature, light and all other strictly professional matters, are executed faithfully.

He shall keep a copy of all notices to relatives and friends of deceased patients, and such official correspondence as may be referred to him.

When a patient is dangerously ill, he shall notify, if possible, some near relative or friend of the patient, and inquire of the patient, upon approval of the physician, whether he desires to converse with a clergyman, and shall invite such person to attend, if requested.

In case of the death of a patient, he shall cause the name of the patient and time of the death to be entered in the register to be kept for the purpose, and shall see that the body is conveyed, as soon as conveniently may be, to the mortuary. No postmortem examination shall be made without his express permission in writing, which shall not be given until he has received permission in writing from the nearest relative of the deceased.

Whenever articles of value, or other effects are left by a deceased patient, he shall cause them to be labeled with the name of the patient and the date of his death, and shall hold them for delivery to the proper relatives or friends of the deceased, or for the action of the executive committee.

He shall, in the event of the death of a patient, report the same immediately to the attending physician.

He shall see that the hospital attendants are instructed properly in regard to their respective duties in case of an alarm of fire.

He shall perform such other duties as the executive committee may from time to time direct.

He shall see that, in case of his own absence from the institution, a qualified member of his staff is in the institution and ready to execute the regular and emergency duties usually devolving upon the superintendent.

Coordinated Effort Is Necessary

The writer has covered, superficially, the administrative control of policies and management. He believes that he has demonstrated the need of coordinated effort in developing a modern hospital. It should be emphasized that organization lines must be followed in the transmission of orders. It is a grievous error for a superior officer to transmit requests direct to the workman if, in so doing, he leaves out the sub-officer who controls that workman. The superintendent who "goes over the head" of a chief of a department weakens the latter's control of his employees and takes upon himself detail that he should not attempt to assume. It matters not how menial his job, no employee can be expected to receive orders from everyone, and if this method is employed it is bound to result in friction and general chaos.

We all like to be praised for good work and constructive accomplishment. The superintendent in order to get the regard of his department heads and their cooperation must take them into his confidence and discuss the good as well as the bad with them. He, further, should arrange periodical meetings of various departmental groups—doctors, nurses, office staff, servants—and should explain to them their relationships to himself and to the hospital. This not only makes plain to each group the problems relating to their jobs, from the viewpoint of the administration, but gives them a clear picture of the organization in its entirety.

Bibliography

1. Chapman, Frank E. Hospital Organization and Operation, pages 4-11.
2. Transactions of the American Hospital Association, 1925, page 403.
3. Hospital Management, March, 1927, and April, 1927.
4. Weber, Joseph J. First Steps in Organizing a Hospital, pages 188-199.

PATIENTS MAY ALSO BE STUDENTS

When we speak of occupational therapy we think as a rule only of work with the hands. That occupational therapy may take other forms is the viewpoint developed by Dr. David A. Stewart, superintendent, Manitoba Sanatorium, Ninette, Manitoba, in an article in the *Journal of Outdoor Life*. Although Dr. Stewart has in mind more particularly patients in sanatoriums, many of his suggestions are applicable to patients in a general hospital. He says in part:

"Every man needs a play job as well as a work job, an avocation as well as a vocation. And this need is not the less but far the greater in chronic illness with its long empty hours, and its uncertain outlook into the western haze.

"Study is occupational, cultural and soul satisfying, though too much may well be, as Solomon has said, a weariness of the flesh. From poetry, history or astronomy, from geology, literature or language, there may linger an after-glow for the long watches of the night or day when the lamp of energy burns dim.

"There is something in books that can interest every human being, not wholly idiotic, if it could be found. In a hospital ward a stranger may pick out those who are occupied and those who only dawdle. No avocation, no filler for chinks of time, is half so generally suitable as study. Time that might be wastefully killed is usefully and pleasantly filled.

"Should not every sanatorium be a university, and every man and woman in it a student? Might not the inquiries on admission include school history as well as health history, preferences in books as well as in foods, mental and social needs as well as physical?"

NEWS OF THE MONTH

PRACTICAL TOPICS COVERED AT NEW YORK MEETING

THE third annual conference of the Hospital Association of the State of New York convened at the Hotel Syracuse, Syracuse, N. Y., May 26, 1927.

An address of welcome was delivered by the mayor of Syracuse, Hon. C. G. Hanna, and was followed by the address of the president of the association, Dr. George P. Landers, superintendent, Highland Hospital, Rochester.

Dr. Landers emphasized the ever-present need for hospitals to explain and "sell" themselves to the public. He stated that it was no longer possible for hospitals modestly to hide their achievements and to depend upon the public to recognize their altruistic purpose. He considers hospital conferences and associations to be definitely necessary in promoting the proper publicity and community understanding of their needs and their services.

Paid Secretary Desirable

Among other subjects discussed by Dr. Landers was the need for a paid secretary for the association. The only income of the association being from dues, it was pointed out that a considerable increase in the number of members would be necessary if a salaried person were to be engaged. If such income was not derived from personal dues, it might be possible to establish an institutional membership whereby each hospital in the state might pay a part of the expenses of the association. As an alternative to the employment of an executive secretary, Dr. Landers felt that for the coming year it might be sufficient if the association could pay for the clerical service of a volunteer secretary.

Then followed the report of the executive secretary, Edgar C. Hayhow, superintendent, New Rochelle Hospital, New Rochelle. Mr. Hayhow made the same recommendations regarding his own office as had been advanced by Dr. Landers, at the same time signifying his own inability to continue as executive secretary, regardless of the matter of compensation. The secretary's report showed a total membership of 222, of which 196 were personal, active members and the remainder associate members.

Sara G. Burns, superintendent, New York Skin and Cancer Hospital, New York, gave her report of three years' service as treasurer. Total receipts during the three years were $2,174; total expenses, $1,188. Miss Burns' report was followed by that of the auditing committee. Clarence Ford, New York State Board of Charities, New York, reported for the membership committee that an intensive campaign through the mail had been and was being made for an increased membership.

Dr. John E. Daugherty, superintendent, Jewish Hospital, Brooklyn, gave an extensive report of the legislative committee. The report indicated close cooperation between the hospital association and the legislative representatives of the State Board of Charities and the State Charities Aid Association. The report detailed the legislation affecting hospitals that was before the 1927 session of the legislature, and indicated that some favorable legislation had been passed, and that according to the best judgment of the committee, no laws had been passed that were in any way derogatory to hospitals.

S. L. Butler, superintendent, Long Island College Hospital, Brooklyn, gave his report as chairman of the committee on workmen's compensation problems. Among other recommendations, Mr. Butler's committee urged that the hospitals of New York State establish a minimum rate of $4.50 per day for all compensation cases. It was emphasized that the hospitals of Westchester County were already charging $4.50, including extras; that the hospitals in the Brooklyn Hospital Council were charging $4.50 per day, plus extras. The committee had circularized more than two hundred hospitals and found that the average cost in New York state of caring for compensation cases was $4.61 per day. Some discussion developed on this point, it being the contention of certain members that it would be more just for each hospital to charge its per capita cost for caring for compensation cases rather than any stated figure. The committee's report was accepted, however, and the association went on record as recommending the $4.50 rate to boards of directors as a just minimum charge.

The afternoon meeting opened with an excellent paper by Prof. Isabel M. Stewart, R. N., Teachers College, Columbia University, New York, on "The Nurses' Curriculum." Miss Stewart brought out the fact that the increasing complexity of medical and public health science is necessarily putting greater burdens on the nursing profession, in view of which it is obvious that nurses must be sufficiently educated to make intelligent assistants and coworkers for the doctors and others with whom they must work.

Nurses' Work Should Be Analyzed

Miss Stewart said she felt that it might be justly said that a nurse had been overtrained, but that she had never yet encountered a nurse who was overeducated. She stated that the total amount of actual classroom work in nurses' training schools in a full three-year course did not equal the amount of classroom work done by medical students on a single subject, such as anatomy. She believes it to be important that the present excellencies and deficiencies of the graduate nurses now practicing in the various fields of nursing be carefully analyzed, and that from such an analysis a careful curriculum be devised for the nurses' training school of the future. She brought out the fact that the average training school has only one hour of theoretical work to fifteen or twenty hours of duty on the wards and that some schools that have a proportion of one hour of theoretical work to

News of the Month

eight or ten hours of ward work are considered to be reactionary. On the other hand, such subjects as home economics, social service and other scientific specialties never have less than one hour of theory to one hour of practice work. She feels that it is important that we definitely admit the fact that the long period of time spent by the student nurse on ward work is not necessary for her training, but is in reality a means by which she pays the hospital for her board, room and education.

"Correlativity of the Hospital and School of Nursing" was the subject of Dr. Albert T. Lytle, Buffalo, who gave interesting figures and displayed charts and tables to show that while the student nurse system was not much cheaper than the graduate nurse system, there was a definite ledger balance in favor of the student nurse, even under present rigorous educational requirements.

The convention dinner was held at the Onondaga, Golf and Country Club, Onondaga, the speaker being the Rev. John J. McCreary.

Superintendent Should Know Each Trustee

On Friday morning Charles F. Neergaard, a member of the board of trustees of the Brooklyn Hospital, Brooklyn, and of the Carson C. Peck Hospital, Brooklyn, read a paper on "The Relationship of the Superintendent and the Trustees." Mr. Neergaard advocated close acquaintanceship between the superintendent and the members of his board. He pointed out the value to the superintendent of knowing the special qualifications and hobbies of each trustee. Intimate knowledge of this sort assists the superintendent greatly in utilizing the ability of each man.

An excellent round table meeting was conducted by John R. Howard, Jr., vice-president of the association and superintendent, New York Nursery and Child's Hospital, New York. The round table was entirely informal and speakers were not even requested to give their names and hospital connections. This informal atmosphere seemed to encourage the members in freely expressing their opinions. Among the subjects discussed were economy of linen, fire drills, whether hospital staff members should be given a discount of hospital bills for themselves and families; vacations and sick leaves; sliding scales of pay with automatic increases, and whether doctors should be appointed as members of the board of trustees.

The afternoon session was given over to two excellent papers on personnel problems: "Hospital Labor Turnover," by Jacob Goodfriend, assistant superintendent, Montefiore Hospital, New York, and "Hospital Personnel," by Dr. Christopher G. Parnall, medical director, Rochester General Hospital, Rochester. Mr. Goodfriend reported a study of labor turnover in fifty-four hospitals in the New York area, with a total bed capacity of 34,000. A summary of this report is as follows:

Position	Salary	Turnover per month
Orderly	$47	37 per cent
Waiter	$42	34 per cent
Porter		28 per cent
Maid		17 per cent

Mr. Goodfriend also reported that two of the hospitals studied were in the habit of finger-printing all employees for the purpose of eliminating persons with police records and for use in case future identification should be required because of deaths in the hospital or for other reasons. It was also reported in this paper that a committee representing forty-five hospitals in the New York area was giving serious consideration to the establishment of a clearing bureau for the registration of all hospital workers. The plan would provide that identifying data concerning every worker in each of the participating hospitals should be on file at a central point. It would then be possible for each hospital to clear each applicant through this bureau before employing him and ascertain whether he had had a previous good or bad record elsewhere. The question of the "itinerant" hospital worker was discussed and it was believed that the clearing bureau would assist materially in eliminating persons who are constantly changing their positions, or would at least force them to stay longer with their jobs.

Dr. Parnall gave a resumé of the hospital personnel and organization as they should be, and included everyone concerned, from the board of trustees down.

The incoming president, Col. Louis C. Trimble, superintendent, New York Post-Graduate Medical School and Hospital, New York, then took the chair and introduced the following officers who had just been elected: president-elect, Dr. John E. Daugherty, superintendent, Jewish Hospital, Brooklyn; first vice-president, Dr. William L. Wallace, president, Crouse-Irving Hospital, Syracuse; treasurer, P. Godfrey Savage, superintendent, Memorial Hospital, Niagara Falls; Trustees, Dr. George B. Landers, and Dr. C. W. Munger, director of hospitals and health of Westchester County, Valhalla, N. Y.

Edgar C. Hayhow had presented his resignation as executive secretary, but as this office is filled by the board of trustees, it was not included in the above ticket.

COMING MEETINGS

American Protestant Hospital Association.
President, Robert Jolly, Baptist Hospital, Houston, Texas.
Secretary-treasurer, Rev. Frank C. English, Christ Hospital, Cincinnati.
Next meeting, Minneapolis, Minn., October 8-10, 1927.

American College of Surgeons.
President, Dr. W. W. Chipman, Montreal.
Director General, Dr. Franklin H. Martin, 40 E. Erie St., Chicago.
Next meeting, Detroit, Mich., October 3-7, 1927.

American Dietetic Association.
President, Florence Smith, St. Mary's Hospital, Rochester, Minn.
Secretary, Quindara Oliver, 25 Marlboro Street, Boston.
Next meeting, St. Louis, Oct. 17-19, 1927.

American Hospital Association.
President, Dr. R. G. Brodrick, University of Stanford Hospitals, San Francisco, Calif.
Executive secretary, Dr. William H. Walsh, 18 East Division Street, Chicago.
Next meeting, Minneapolis, Minn., October 10-14, 1927.

American Occupational Therapy Association.
President, T. B. Kidner, 175 Fifth Avenue, New York.
Sec.-Treas., Eleanor Clarke Slagle, 175 Fifth Avenue, New York.
Next meeting, Minneapolis, Minn., Oct. 10-14, 1927.

American Public Health Association.
President, Dr. Charles V. Chapin, Providence, R. I.
Executive Secretary, Homer N. Calver, 370 Seventh Avenue, New York.
Next meeting, Cincinnati, Oct. 17-21, 1927.

Children's Hospital Association of America.
President, Robert E. Neff, Robert W. Long State Hospital, Indianapolis, Ind.
Secretary-treasurer, Bena M. Henderson, Milwaukee Children's Hospital, Milwaukee, Wis.
Next meeting, Minneapolis, Minn., Oct. 12-13, 1927.

News of the Month

SAN FRANCISCO TO BE 1928 MEETING PLACE OF A. H. A.

As this issue goes to press announcement is received that at a meeting of the board of trustees of the American Hospital Association held at association headquarters on June 20, it was decided to hold the 1928 convention at San Francisco.

As announced elsewhere in this issue, the Hospital Library and Service Bureau will, in the near future, occupy space in the association's building and at the meeting the board appropriated a sum of $5,000 for the equipment and decoration of the library.

Other subjects discussed and reported on at the meeting were an international hospital convention; hospital insurance rates which are being investigated by a special committee headed by Dr. Joseph C. Doane; the finances of the association and the organization of constituent associations, including a plan for affiliation which will be submitted at the October meeting.

ASSOCIATION OF HOSPITAL SOCIAL WORKERS HAS NEW SECRETARY

Helen Beckley has been appointed the executive secretary of the American Association of Hospital Social Workers and has assumed her duties at the national headquarters, 18-20 East Division street, Chicago. Miss Beckley has recently been giving her time to research work in connection with the Denver Tuberculosis Society, Denver, Colo.

NEW QUARTERS FOR HOSPITAL LIBRARY AND SERVICE BUREAU

The Hospital Library and Service Bureau, Chicago, which is a part of the American Conference on Hospital Service, is to have new quarters. An offer of space made by the American Hospital Association has just been accepted by the American Conference on Hospital Service. This space, for which there is to be no charge, is given in lieu of the annual contributions hitherto made by the A. H. A. This move does not mean a change in ownership or administration of the bureau which will continue to be operated by the conference.

No definite date for moving has been set, but the change in quarters will probably be made in the early Fall.

VETERANS BUREAU HOSPITALS MEET MINIMUM STANDARDS

Brig. Gen. Frank T. Hines, director, U. S. Veterans Bureau, has just been advised that every one of the fifty-two hospitals maintained and operated by the bureau has been fully approved by the American College of Surgeons, having met the minimum standards of the College.

The Veterans Bureau hospitalization program is the largest in the world, and attainment of this high standard throughout the service is one of the outstanding features of the present administration of the Veterans Bureau.

In announcing to the director the full approval of these institutions, Dr. M. T. MacEachern, director of hospital activities, American College of Surgeons, Chicago, took occasion to acknowledge "the whole-hearted support of the director and his staff and personnel in the various hospitals considered," as contributory factors in attaining the 100 per cent mark.

Dr. MacEachern stated that in no other part of the entire hospital field has the American College of Surgeons received better cooperation than in its dealings with the Veterans Bureau.

MICHAEL M. DAVIS TO MAKE STUDY OF CLINIC WORK

With the completion of the work of the Committee on Dispensary Development of the United Hospital Fund of New York, and the disbanding of its organization, the field work for the improvement of clinics in New York City has been taken over by the New York Tuberculosis and Health Association. Michael M. Davis, who has served as executive secretary during the six-year period of the committee's existence, is now undertaking a study of the administrative and community aspects of hospital and clinic work, a study that is being financed by the Rockefeller Foundation. Mr. Davis will serve as consultant for the associated out-patient clinic committee of the New York Tuberculosis and Health Association.

ULSTER COUNTY, N. Y., GETS $2,500 FROM STATE

All counties in the State of New York are now eligible to receive aid from the state for public health work under the terms of a new law which recently became effective by the signature of the governor. Heretofore only those counties were eligible in which there was no city having a population of 50,000 or more. The governor has also approved a bill carrying grants of $91,733 for such work and in the distribution of this money a sum of $2,500 has been allocated to Ulster County for rural general hospitals.

PIONEER IN NEUROLOGICAL WORK HONORED

The Neurological Institute of the Columbia-Presbyterian Medical Center, New York, has received $200,000 from William Bingham, 2nd, of New York and Cleveland, to be used in recognition of the notable work in neurology done by Dr. John George Gehring, Bethel, Maine. The gift will be used for a complete ward floor, fully equipped, in the new building of the Neurological Institute, and the floor will be dedicated in honor of Dr. Gehring.

Dr. Gehring was a pioneer in the field of neurology and his services have been of a unique character. The board of trustees of the Neurological Institute has long wished to do him honor, according to the *Medical Journal and Record.*

News of the Month

THREE STATES DISCUSS MUTUAL PROBLEMS AT JOINT MEETING

THE formation of a section which in the future will hold a joint meeting was successfully consummated at the meeting of the Missouri Hospital Association held at Kansas City, Mo., May 27 and 28. Missouri, Kansas and Oklahoma are the three states that have joined and they will meet once a year for the discussion of mutual problems, although state meetings of all three states will also continue to be held.

The new section will have the following officers: president, Dr. B. A. Wilkes, superintendent, Missouri Baptist Sanitarium, St. Louis; first vice-president, Dr. Fred S. Clinton, president, Oklahoma Hospital, Tulsa, Okla.; second vice-president, Dr. A. R. Hatcher, superintendent, Hatcher Hospital, Wellington, Kan.; trustees, Rev. L. M. Riley, superintendent, Wesley Hospital, Wichita, Kan., Dr. J. T. Axtell, secretary Kansas Hospital Association, Valetta A. Kettering, superintendent, Grace Hospital, Hutchinson, Kan., Dr. Louis H. Burlingham, superintendent, Barnes Hospital, St. Louis, Dr. Rush E. Castelaw, Wesley Hospital, Kansas City, Mo.; Muriel Anscombe, superintendent, Jewish Hospital, St. Louis; Dr. T. B. Hinson, Enid, Okla., Dr. F. H. McGregory, Mangum, Okla., and Mrs. McNulty, Tulsa, Okla.

The meeting of the Missouri Hospital Association, with which was combined this year the meeting of the Kansas Hospital Association and the Oklahoma Hospital Association, was an unqualified success. Dr. B. A. Wilkes presided and by his exceptional personality kept the entire meeting alive from start to finish. The program that was prepared was varied and valuable and the speakers each presented interesting and practical facts. Dr. E. W. Caveness, director of health, Kansas City, gave the address of welcome which was responded to by Dr. Wilkes. J. R. Smiley, superintendent, St. Luke's Hospital, Kansas City, Mo., who had charge of the local arrangements announced the social features of the sessions and this announcement was followed by the delivery of Dr. Wilkes' presidential address which appears on page 81.

Many Visitors Present

Many of the visitors who were present were at this time introduced. Margaret Rogers, superintendent, St. Luke's Hospital, St. Paul, Minn., a trustee of the American Hospital Association; Paul Fesler, superintendent, University of Minnesota Hospital, Minneapolis, Minn.; Mary Roberts, editor of the *American Journal of Nursing*, New York; Matthew O. Foley, editor of *Hospital Management*, Chicago, and John A. McNamara, executive editor of THE MODERN HOSPITAL, Chicago, were each introduced and spoke briefly.

The afternoon session was replete with interesting papers. Dr. May Ayres Burgess, director of the Committee on the Grading of Nursing Schools, New York, outlined the work that the committee had done thus far and illustrated her talk with charts showing the results of the questionnaires that have been sent out from New York. Dr. M. T. MacEachern, associate director, American College of Surgeons, Chicago, gave for the first time the standards for a Class A Hospital. He told of the requirements that will be needed to be thus ranked and in a comprehensive way he detailed the various branches of hospital administration that must be improved before a hospital in the future may be considered Class A. The third speaker was Dr. Jabez N. Jackson, president of the American Medical Association, Kansas City, Mo.

A theater party was given by the association in the evening at a nearby theater and was thoroughly enjoyed.

On Saturday morning Dr. L. E. Emanuel, president of the Oklahoma Hospital Association, Chickasha, Okla., delivered a paper on the position occupied by the hospitals in their respective communities. He said that this place was paramount in every city and was as important as the court house or the schools. He emphasized the point that a community was no better than its hospitalization and told of some of the accomplishments in Oklahoma. His paper was discussed by Dr. Clinton who urged all the hospitals to see to it that better service was given.

The second paper of the morning was given by Dr. J. D. Bunton, president of the Kansas Hospital Association, and his subject was "A Triangle—The Basis of Every Hospital's Success." Dr. Bunton stated that the three essentials of good hospitalization were good equipment, good medical care and good administration. He enlarged upon this theme and explained in detail his thoughts on the subject. Rev. L. M. Riley discussed the paper and several of those present entered into a general discussion of both of the papers.

Saturday afternoon was spent in a tour of the city and a visit to hospitals.

The evening session was devoted to a dinner and a round table. Following the dinner Dr. William H. Walsh, secretary of the American Hospital Association, Chicago, gave his impressions of the program. Following some humorous remarks by Dr. Wilkes, Dr. Burlingham took up the discussion of the many questions that had been placed in the question box.

The meeting finished late Saturday evening, the concensus of opinion being that it had been distinctly worth while. Dr. Frank C. English, secretary of the American Protestant Hospital Association, Cincinnati, was present on the second day and issued an invitation to all those present to attend the meeting of that organization in Minneapolis on October 8, 9 and 10.

LOW PRICED ROOMS TO FEATURE NEW WARWICK HOSPITAL

It is planned to erect a $500,000 hospital on a 200-acre tract of land at Warwick, N. Y., at an altitude of 1000 feet above sea level. The hospital will be designed primarily to serve the needs of the man of moderate means and will have private and semi-private rooms ranging in price from $17.50 to $25 a week. There will be no charity patients. A swimming pool, golf course and tennis courts will be provided. The hospital will have its own nurses' training school.

Personals

MRS. ANNA W. TURNER, R.N., is the new superintendent of the Maple Avenue Hospital, DuBois, Pa. MRS. TURNER was formerly on the staff of the Reading Hospital, Reading, Pa.

H. V. CAMPBELL has resigned the superintendency of the West Texas Baptist Sanitarium, Abilene, Tex., and will return to the Baylor University Hospital, Dallas, Tex., as assistant superintendent, a position which he occupied some years ago.

MRS. DELIA HANNA, R.N., is the new superintendent of the Helena Hospital Association, Helena, Ark. MRS. HANNA has been doing special work in anesthetics at Grace Hospital, Detroit, Mich., and in clinic work at Greenville, Miss.

DR. LOUIS R. BROWN has been reappointed superintendent of the State Hospital for Nervous Diseases, Little Rock, Ark., for a period of four years.

DR. CADMUS M. BROOKS is the new superintendent of the Little Rock General Hospital, Little Rock, Ark., appointed to succeed DR. MILTON VAUGHAN, resigned.

DR. KARL M. BECK was recently appointed superintendent of the Lake County General Hospital, Waukegan, Ill., succeeding DR. CHARLES LIEBER.

DR. ELMER T. MCGAUGH has been appointed superintendent of State Hospital No. 1, Fulton, Mo., succeeding DR. M. O. BIGGS.

DR. T. F. BOSTON was recently appointed assistant superintendent of Illinois State Hospital, Kankakee, Ill. DR. BOSTON was formerly on the staff of St. Peter Hospital, St. Peter, Minn.

J. F. BERRY has recently severed his connection with the Chicago Municipal Tuberculosis Sanitarium, Chicago.

VERONICA STAPLETON, superintendent of nurses, James Whitcomb Riley Hospital for Children, Indianapolis, has resigned to become director of nurses in the new Municipal Hospital, Tampa, Fla.

FRANK E. BROOKE has recently resigned as superintendent of the Harrisburg Hospital, Harrisburg, Pa. MR. BROOKE has been superintendent of this institution for the past six years.

DR. GEORGE W. GROTH has taken over the management of the Sierra Madre Hospital, Sierra Madre, Calif. DR. GROTH built this hospital sometime ago and is having it completely refinished and renovated before again receiving patients.

FRANK D. KING has been appointed superintendent and business manager of Hurley Hospital, Flint, Mich., succeeding DR. BYRON E. BIGGS who resigned recently. DR. BIGGS will go to Ann Arbor as assistant director of the University Hospital there.

LEWIS A. SANDERS, formerly chief anesthetist and teacher of anesthesia at Baylor Hospital, Dallas, Tex., is the new superintendent of West Texas Baptist Sanitarium, Abilene, Tex.

HILDA AYERST has resigned as assistant superintendent of the Memorial Hospital, Hartford, Conn., to join the staff of Mount Sinai Hospital, New York. She will be succeeded by HANNAH B. OGDEN, a member of the staff of the Philadelphia General Hospital.

CHARLOTTE JANE GARRISON, formerly superintendent of the American Hospital, Chicago, is the temporary superintendent of the Community Hospital, Geneva, Ill.

MRS. R. H. JADWIN has been appointed superintendent of the Scranton State Hospital, Scranton, Pa. MRS. JADWIN has been acting superintendent since the resignation of JOSEPH PURVIS.

EDGAR C. HAYHOW has resigned from the superintendency of the New Rochelle Hospital, New Rochelle, N. Y.

REV. BENJAMIN RUPP, superintendent of the Mennonite Sanitarium, Bloomington, Ill., since 1919, has recently resigned. MR. RUPP will be succeeded by NOBLE HOOVER.

FLORENCE HAEHN recently resigned from the superintendency of the Hays Protestant Hospital, Hays, Kans.

SISTER MARY PETRA is the new superintendent of St. Mary's Hospital, Madison, Wis.

MRS. M. H. BRIGHT has been appointed assistant superintendent of the new Houston Negro Hospital, Houston, Tex., and superintendent of nurses.

J. B. FRANKLIN has been appointed superintendent of the Georgia Baptist Hospital, Atlanta, Ga. MR. FRANKLIN has served as superintendent of the Hermann Hospital, Houston, Tex., and for thirteen years was superintendent of Baylor Hospital, Dallas, Tex.

DR. M. W. KEMP has been appointed assistant superintendent of the Fergus Falls State Hospital, Fergus Falls, Minn. DR. KEMP was formerly senior physician at the Newberry State Hospital, Newberry, Mich.

DR. L. G. STEEK was recently appointed superintendent of the Snoqualmie Falls Hospital, Snoqualmie Falls, Wash.

DR. F. W. MITCHELL has been reappointed superintendent of the Southern Idaho Mental Hospital, Blackfoot, Idaho.

DR. ROBERT E. SCHWARTZ has been appointed superintendent of the Koch Hospital, St. Louis, Mo., succeeding DR. H. D. SPECTOR.

MISS B. GUERNSEY, assistant superintendent of the Royal Alexandra Hospital, Edmonton, Alberta, for the past three years, has tendered her resignation, effective July 1.

DR. MORTON P. DICKESON, medical director of Dr. Dickeson's Private Hospital, Media, Pa., died recently at the National Stomach Hospital, Philadelphia.

DR. MALCOLM R. BOW, superintendent Regina General Hospital, Regina, Sask., was recently appointed deputy minister of public health in the Providence of Alberta.

DR. HUGH S. GREGORY, formerly pathologist of the Binghamton State Hospital, Binghamton, N. Y., has taken charge of the Steuben Sanatorium, Hornell, N. Y.

News of the Month

NATIONAL T. B. ASSOCIATION HAS SUCCESSFUL CONVENTION

The program of the twenty-third annual meeting of the National Tuberculosis Association at Indianapolis, May 23 to 26, was one of unusual excellence. For the second time in the history of the association a special program committee had charge of the entire development of the program arrangements which resulted not only in a better unified program but in one that was of a higher order scientifically.

Probably the outstanding meeting of the whole conference was the general meeting addressed by Dr. Herbert S. Jennings, Johns Hopkins University, Baltimore, Md., who spoke on "Health Progress and Race Progress." Dr. Jennings' thesis aimed to demonstrate that public health work does not in and of itself tend toward race deterioration as has been contended by Wiggam and others. In fact, according to Dr. Jennings, who is one of the leading authorities in modern genetics, public health work is necessary in preserving to society the fittest of the fit.

In the pathological section an interesting session was arranged by Dr. David T. Smith, pathologist, New York State Hospital for the Treatment of Incipient Pulmonary Tuberculosis, Ray Brook, N. Y., on "Chronic Non-Tuberculous Suppurative Diseases of the Lungs." This session touched on topics that offer to the skilled diagnostician many points of interest.

In the clinical section "Latent Tuberculosis in Children" was discussed by Dr. Eugene L. Opie, Henry Phipps Institute, Philadelphia. Dr. Opie summed up his work of many years in dealing with tuberculous families and presented conclusions with regard to latent and juvenile tuberculosis that are little short of revolutionary in their effect upon the tuberculosis program. For example, Dr. Opie pointed out that such ordinary rules of thumb as 7 per cent or 10 per cent below average weight in school children mean nothing so far as they relate to the existence of tuberculosis. Children may be above weight or of normal weight and still show signs of latent tuberculosis. Contact in the home, particularly on the part of adult parents, is a vital factor, and this coupled with a tuberculin reaction and an x-ray is of the greatest significance in determining this difficult type of tuberculosis.

Administrative Problems Discussed

The sociological section had an important session on "Hospitalization and Rehabilitation of the Tuberculous." Mrs. Alice E. Klein's paper on "The Placement and Rehabilitation of the Tuberculous" was of outstanding interest. Mrs. Klein gave a resumé of three years of intensive work with the New York Tuberculosis and Health Association, New York, in the placement of tuberculous patients.

The administrative section, a new section dealing with administrative problems of tuberculosis associations, had its first meeting at Indianapolis and was of great interest to all those who attended.

In point of view of attendance the meeting at Indianapolis was noteworthy. More than 845 people were registered and represented practically every state in the Union.

The following officers were elected for the coming year: President, Dr. H. Longstreet Taylor, St. Paul, Minn.; honorary vice-presidents, the Hon. Calvin Coolidge, Washington, D. C., and Dr. William H. Welch, Baltimore, Md.; vice-presidents, Dr. Alfred Henry, Indianapolis, and Dr. William Charles White, Washington, D. C.; secretary, Dr. Charles J. Hatfield, Philadelphia; treasurer, Henry B. Platt, New York.

The next annual meeting of the National Tuberculosis Association will be held at Portland, Ore., the date to be determined later.

WORK UNDER WAY ON HOSPITAL AT EAST CHICAGO

Construction is in progress on a general hospital for East Chicago, Ind., which is being erected under the joint auspices of the order of Poor Handmaids of Jesus Christ and the Manufacturers' Association of East Chicago. Besides serving the community the hospital is to care for the employees of the thirty-one industries comprising the Manufacturers' Association.

The building will be five stories high and will contain 340 beds. It will be T-shaped, so that each room will have outside sunlight and air. Each floor is to have a sun parlor of its own. Steel and reinforced concrete will be used in the construction and the building will be fireproof. The cost will be about $1,250,000.

PROTESTANT HOSPITAL ASSOCIATION TO MEET AT MINNEAPOLIS

The American Protestant Hospital Association will hold its annual convention at Minneapolis, Minn., October 8, 9 and 10, having its headquarters at the Curtis Hotel. Dr. Frank C. English, Christ Hospital, Cincinnati, the energetic secretary of the association, has a varied and interesting program tentatively planned for the meeting and it is expected that there will be a large attendance.

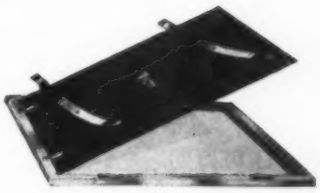
NOTABLE SPEAKERS ON PROGRAM AT NEW JERSEY MEETING

The third annual conference of the New Jersey Hospital Association was held at Atlantic City, N. J., June 7 and 8.

Many interesting topics were considered at the various sessions and among the speakers and their subjects were the following: "Hospital Service and the Public Health," Dr. Louis I. Harris, commissioner, Department of Health, New York City; "The Community's Relation to Nursing Education and Nursing Activities," Annie W. Goodrich, dean, school of nursing, Yale University, New Haven, Conn.; "The Dietitian and the Superintendent," Elizabeth Miller, chief dietitian, Philadelphia General Hospital, Philadelphia; "The Contribution of the Hospital to Science," Dr. Joseph C. Doane, medical director, Philadelphia General Hospital, Philadelphia; "Social Service and Its Status in the General Hospital," Dr. Charles England, Essex County Hospital, New Jersey.

Two round table conferences were held which gave scope for lively discussion and on Tuesday evening, June 7, a social reception was taken part in by the delegates.

10 M. A. Radiator-Type Coolidge Tube



The Victor Cassette

How to Modernize an Old X-Ray Equipment

Victor Model Potter-Bucky Diaphragm

ONE of the greatest handicaps under which many X-ray laboratories are operating today is the attempt to produce good radiographic results with a too limited amount of accessory equipment.

This is especially true where the equipment has been in use for several years, as often-times the blame for inferior radiographic work is laid to "age of equipment," when as a matter of fact a new machine would show only a small improvement in the quality of work if the accessories so necessary to modern technic were not used. There are no doubt many existing X-ray equipments which offer years of usefulness, if by the addition of proper accessory equipment they are modernized.

Illustrated herewith are a few accessory items, one or more of which may prove to be all that is necessary to bring some present inadequate equipments up to the standard of present-day requirements for the highest quality of radiographic results.

Victor Stabilized X-Ray Timer

Victor-Kearsley Stabilizer

Victor Auto-Transformer Unit

Send for the May-June issue of "Service-Suggestions," which contains an interesting and instructive article on this subject.

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High Frequency, Ultra-Violet, Sinusoidal, Galvanic and Phototherapy Apparatus

For complete index of advertisements refer to the Classified Directory

News of the Month

CLINICAL CONGRESS EMPHASIZES PREVENTIVE MEDICINE AND HIGH HOSPITAL IDEALS

THE need for high and ever higher ideals of hospital service and the importance of preventive medicine in the form of periodical health examinations—these were the notes repeatedly struck by speakers at the first Hospital Clinical Congress of North America, which opened a five-day convention at Milwaukee, Wis., June 20. With the congress was merged the twelfth annual convention of the Catholic Hospital Association.

In its form this congress represented in a measure a departure from previous hospital meetings, in that few formal papers were presented, the ordinary program being replaced by a series of group conferences with demonstrations and round table discussions. These conferences or clinics, as they were called, made up approximately 90 per cent of the program and formed a new and interesting feature. Practical demonstration and practical teaching in each department of the hospital was accentuated, and the methods adopted and the informal character of the clinics led to much free discussion and to the solving of many individual problems by the question and answer method.

Exposition Is Notable Feature

Perhaps the most striking feature of the congress was the exposition of equipment and supplies which was carried out on a grand scale by exhibitors numbering over one hundred. In the spacious setting of the Milwaukee Auditorium the display was impressive and gave silent evidence of the vastness, variety and far-reaching importance of the hospital field. It was apparent to the visitor examining the different booths that the various manufacturing firms sharing in this important end of the congress had given both time and thought to making their displays attractive, as well as interesting and instructive to the Sisters and others attending the meeting. Additional emphasis was given to the exhibits by the fact that the clinics were held right in the midst of the equipment related to the talk being given, thus focusing attention in a definite manner on the equipment and bringing together the practical and the theoretical.

The exhibits were grouped and were used as centers for discussion and demonstration from the actual equipment, furniture and supplies in constant use in modern hospital practice. In this way the hospital itself as a physical plant was visualized before the attending delegate who could thus more easily grasp and retain the principles and views set forth by the speakers.

Dr. J. R. Hughes, dean, college of hospital administration, Marquette University, Milwaukee, Wis., presided at the general opening meeting on Monday afternoon, June 20, and explained the congress plan and program. The speakers at this meeting were Rev. A. C. Fox, S.J., LL.D., president, Marquette University, John A. Lapp, LL.D., National Catholic Welfare Conference, Chicago, Judge A. C. Backus, LL.D., Milwaukee, and Rev. C. B. Moulinier, S.J., LL.D., president, Catholic Hospital Association, Milwaukee. The message of these four speakers was the same—the need for hospital service with a soul, dedicated to the best interests of the patient and shunning commercialism. Each speaker stressed the need for self-sacrificing service. Education which is over and above mere training is needed, said Father Fox, for while training may develop deftness and technique it will not contribute the additional qualities of head and heart essential for those who minister to suffering humanity.

Dr. Lapp spoke of education as a magic thing that has not yet shown what it can do in the hospital field, for it has not been organized. There is enough knowledge, he said, but the need is for the application of this knowledge, so that those who engage in hospital service may be educated to be more than mere technicians. Dr. Lapp also spoke of the provisions of the workmen's compensation act and warned hospitals against carrying the burden that belongs to the employers.

A plea for the abolishment of hospital ignorance and for scientific knowledge, broader and deeper than ever before, was made by Rev. Father Moulinier who emphasized the need for more mental culture and more vision.

Considering the question of preventive medicine from the standpoint of the layman, Judge Backus declared that health is purchasable and that a community can determine its own death rate. He pleaded for more and better hospitals and deeper research and said that many hospitals in the United States have outlived their usefulness.

The evening meetings of the congress were open to the public and on Monday evening the subjects of the addresses were industrial surgery and accident prevention and the speakers included Father Moulinier, Dr. Edward H. Ochsner, Chicago and H. J. Mellum, Kenosha, Wis.

Rev. Father Moulinier presided at Tuesday evening's session, which opened with an address on scientific medicine by Dr. Franklin H. Martin, director general, American College of Surgeons, Chicago. Life after forty is fraught with danger for most men, Dr. Martin said, and urged periodical health examinations as an effective means of checkmating the dangers of kidney disease, heart disease and cancer which carry off half the middle-aged.

Dr. MacEachern Gives Illustrated Talk

Dr. MacEachern followed Dr. Martin and by means of colored lantern slides gave a bird's eye view of what a modern, standardized hospital should be, and showed its role in lengthening the span of life.

Dr. James T. Case, Battle Creek Sanitarium, Battle Creek, Mich., told of the development and use of the x-ray in medicine and of its share in outwitting death.

The last speaker of the evening was Dr. Allan Craig, associate director, American College of Surgeons, Chicago, who explained how life has been prolonged by sound medical practice and outlined methods of lengthening life.

On Wednesday morning an interesting meeting was presided over by M. A. Higgins, M.A., lecturer, college of hospital administration, Marquette University. Mr. Higgins gave an instructive talk on basic problems of hospital construction. This was followed by an illuminating talk on the application of color to the hospital, by Rea Paul,

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News of the Month

New York. Mr. Paul made suggestions for color schemes for rooms for different types of patients.

The mornings and afternoons during the convention were occupied with clinics. The limitations of space prevent reference to all the departments in connection with which clinics were held and only a few can be referred to at this time.

In the radiological department Dr. James T. Case, Battle Creek Sanitarium, Battle Creek, Mich., discussed the location and equipment of the x-ray department. The space required depends upon the scope of the work to be done, and the department should not be housed in a damp room or in the basement, he said, as this is inimical to safe x-ray work. The logical place is next to the operating room.

Sister M. Prudentia, R.N., Mercy Hospital, Chicago, outlined the planning, equipment, organization and procedure for major surgery, in the surgical clinic, and spoke of the importance of a sympathetic and considerate attitude on the part of the personnel of the department. Dr. E. M. Davis, Chicago Lying-in Hospital, Chicago, conducted the obstetric department. Prenatal care, birth room technique and postpartum care were the subjects of his talk.

Frank E. Chapman, director, Mount Sinai Hospital, Cleveland, gave a practical talk on the planning of general wards and private rooms, and the equipment of both, as well as on the equipment of utility rooms, diet kitchens, operating rooms and correlated service facilities.

An important clinic was that conducted in the laboratory department where Dr. J. J. Moore, Chicago, spoke on the organization, equipment and personnel of the laboratory, and more particularly on means of procuring postmortems, which, he said, may be considered the most available and quickest means for increasing medical knowledge. Postmortems are necessary to determine the pathological process present, in relation to clinical phenomena and history; to determine the cause of death; to increase medical knowledge; to settle medico-legal questions; to obtain accurate vital statistics, which are now based largely upon clinical diagnosis; and to make known to people the actual cause of death of members of their families, so that if the cause is preventable it may be corrected in other members of the family.

Social Work Is Important

John A. Lapp addressed a round table on community relations. He stressed the fact that the hospital is at the center of social work inasmuch as it deals with the one great cause of human disaster, namely, physical and mental incapacity. Mr. Lapp outlined the field of social work as a trinity consisting of prevention, rehabilitation and care, pointing out the fact that nine million people came to the free dispensaries last year and that other millions of charity patients were treated in the hospitals.

A second phase of the address centered round the hospital and the workmen's compensation laws, in which Mr. Lapp emphasized his well known views that hospitals must receive the cost of their service in workmen's compensation cases or else they will be giving their charity to employers and insurance companies rather than to the injured workman. The injured worker has a legal right to his medical and hospital care and the responsibility for it rests upon the employer who in turn shifts it to an insurance company.

Dr. M. T. MacEachern conducted the administration clinic on Wednesday and gave an illustrated talk on staff organization and staff conference procedure. He outlined the minimum standards for hospitals established by the American College of Surgeons and said that the fundamental requisite for successful operation of any business is organization, and that this applies in fullest measure to the hospital.

Tuberculosis Field Is Reviewed

T. B. Kidner, New York, spoke at the admission room and ward service department, reviewing briefly the development of the ideas regarding the treatment of tuberculosis. He discussed porches, illustrating his remarks with plans of porches suitable for high-grade private institutions and ranging through a series of porches suitable for various other types of institutions.

Taylor Stanley, American Laundry Machinery Company, Cincinnati, addressed the laundry clinic. Mr. Stanley believes that the success of the hospital laundry depends upon the following factors: Correct planning of the laundry; efficient and reliable machinery; scientific management and procedure; properly selected and well paid personnel and rigid inspection and maintenance of machinery. E. E. Jewett, laundry research department, Procter & Gamble Company, Cincinnati, also gave a paper at the laundry clinic, dealing with the relation of the institution laundry to conservation of hospital linen. Attention was called to the importance of having the right quality and temperature of water, as conservation of fabrics depends upon proper cleansing.

Henry L. Kaufmann, Boston, gave a practical talk on mattress protection at the admission room clinic and outlined the evolution of rubber sheeting as it is known today. Heavy rubber was previously used in an effort to prevent wrinkling but heavy material is not comfortable for the patient and light weight rubber is now preferred. Mr. Kaufman gave some practical advice on the storage of rubber sheets, recommending that they be hung up by a suspension device.

The dietary clinic, under the direction of Anne E. Boller, Chicago, aroused a great deal of interest and was one of the best attended clinics of the meeting.

The International Catholic Guild of Nurses held its annual meeting in conjunction with the congress, when an interesting program was presented. An account of this will appear in the August issue.

Over fourteen hundred attended the conference, the majority of whom were Sisters from the Catholic hospitals of the United States and Canada, who displayed great interest in the clinical talks and in the exhibits.

Among prominent hospital men who visited the convention in the course of the week were Dr. R. G. Brodrick, president, American Hospital Association, San Francisco; Frank E. Chapman, director, Mount Sinai Hospital, Cleveland; Robert E. Neff, administrator, Robert W. Long Hospital, Indianapolis, Ind.; Dr. W. H. Walsh, executive secretary, American Hospital Association, Chicago, and Dr. O. F. Ball, president, The Modern Hospital Publishing Co., Inc., Chicago.

At a meeting of the Catholic Hospital Association, held on Friday, the present officers were reëlected for another year.

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SMALL HOSPITAL PROBLEMS DEBATED AT MINNESOTA MEETING

THE Minnesota State Hospital Association has had as its president during the past year, Margaret Rogers, superintendent, St. Luke's Hospital, St. Paul, and as its secretary, Dr. Donald C. Smelzer, superintendent, The Charles T. Miller Hospital, St. Paul. With these two at the helm the success of the association's annual meeting, held at Duluth, June 23 and 24, was assured, and the credit is theirs for an unusually pleasant, well run and profitable meeting taken part in by more than one hundred delegates.

Miss Rogers presided at all the sessions and to the charm of her personality is probably to be attributed the pleasing atmosphere of friendliness and informality noticeable on this occasion.

The program arranged by Dr. Smelzer touched upon widely varied topics, topics, too, that were apparently of practical and keen interest to many, as evidenced by the lively discussion they aroused, which was readily taken part in by many of those present. It was noticeable that an appeal had been made to the interest of the small hospitals, of which Minnesota has a large number.

The meeting opened with invocation by Rev. W. J. Barr, Duluth, after which Mayor S. F. Snively of Duluth welcomed the delegates. Mr. Snively's address was responded to by Dr. Ernest S. Mariette, superintendent, Glen Lake Sanitarium, Oak Terrace, and following this Dr. M. T. MacEachern, associate director, American College of Surgeons, Chicago, spoke on some general hospital problems.

Hospitals Need More Publicity

There is need to teach the public more about hospitals, Dr. MacEachern said, so that people may be familiarized with the inner workings of the hospital machine and may lose that dread of a hospital which is all too common, and which comes to a certain extent from a fear of something not fully known and not fully understood. If the hospital can win the confidence of the people while they are well, these people when they are sick will feel more comfortable in going to a hospital. Let the public in to see the hospital; treat the patient with never-failing courtesy, for a satisfied patient is the hospital's best publicity agent; have an intelligent girl of pleasing personality at the telephone; choose the trustees from among the key people of the community and encourage them to become familiar with the hospital from every angle—these are some of the ways suggested by Dr. MacEachern for winning the good will of the community. Dr. MacEachern stated that the American College of Surgeons is to develop hospital movies and that it will soon be possible for hospitals to have moving pictures of their own.

Dr. MacEachern spoke also of the need of a carefully worked out hospital policy and exemplified the problems that arise when such a policy is lacking. He touched on the question of costs and charges.

On Friday afternoon Miss Rogers gave her presidential address, which included an interesting account of the history of the association from the time of its organization in 1917. Miss Rogers also spoke of the need for simplification and standardization of hospital equipment and supplies and told something of the work done in this connection by the committee on general furnishings and supplies of the American Hospital Association, of which she is chairman. She made a suggestion for the organization of an association that would include with Minnesota the states of Wisconsin, Iowa and North and South Dakota.

The president's address was followed by a paper on hospital libraries by Perrie Jones, librarian, Public Library, St. Paul. Miss Jones emphasized the need for a trained librarian in the hospital.

Dr. W. H. Walsh, executive secretary, American Hospital Association, Chicago, was present at this session and briefly addressed the meeting on the desirability of state hospital affiliation with the American Hospital Association, outlining a plan to be submitted in this connection to the board of trustees of the American Hospital Association.

Open Forum Offers Field for Discussion

The remainder of the afternoon was taken up with the committee reports and an open forum conducted by Dr. Smelzer, in the absence of John Mitchell, manager, Colonial Hospital, Rochester. Group nursing was the first topic and this was discussed by Sister Mar · Ephraim, B.S., R.N., St. Mary's Hospital, Duluth, ana by James McNee, superintendent, St. Luke's Hospital, Duluth. Both speakers pointed out the advantages afforded by the group system, naming the reduced cost to the patient, the regular hours of duty for the nurse and the stability given the nursing staff. It was emphasized that the system should invariably be explained in advance to patients, to avoid misunderstanding.

Other subjects taken up at the open forum were: "The Reception of Patients," by Joseph Norby, superintendent, Fairview Hospital, Minneapolis, and "Inadvisability of Same Person Acting as Superintendent and Superintendent of Nurses," by Mary E. Gladwin, director of nursing education, Minnesota Board of Nursing, St. Paul. A paper on "The Rural Hospital" by Dr. A. F. Branton, Willmar, was read in his absence by Dr. Smelzer.

The feature of Saturday morning's session was a paper on "Registration of Laboratory Technicians," by Dr. Kano Ikeda, director of laboratories, St. Luke's Hospital, St. Paul. This was a plea for the employment of technicians of standardized qualifications and Dr. Ikeda touched on many points of unusual interest. He emphasized the important place the laboratory technician occupies in the hospital, and the necessity for properly regulated training for such technicians, and he advocated the universal registration of qualified technicians with a central board of registry.

An open forum followed Dr. Ikeda's paper, conducted by Dr. F. G. Carter, superintendent, Ancker Hospital, St. Paul. The first speaker was Lydia H. Keller, superintendent, Wesley Hospital, Wadena, who spoke on "The Organization of a Small Hospital." Tnis was followed by a thoughtful and important paper on "The Migratory Consumptive," by Dr. Mariette. "How to Control Break-

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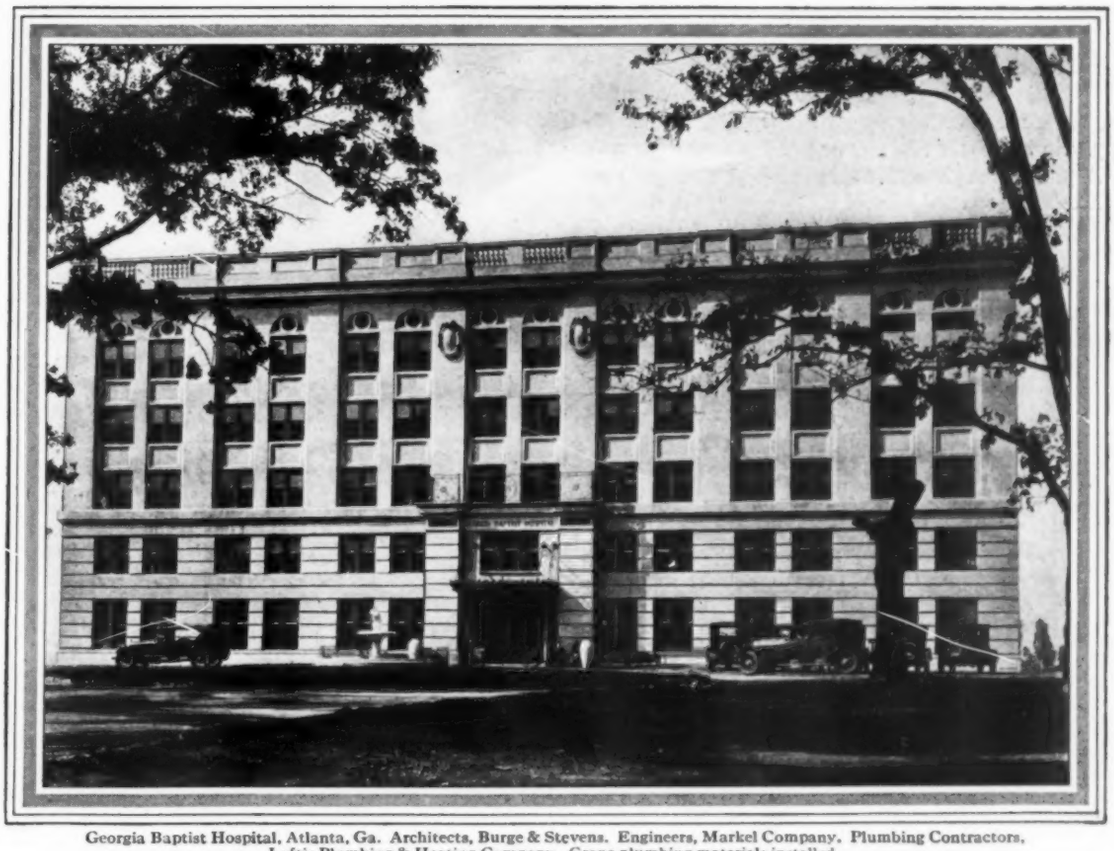

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Baby bath used in maternity ward

News of the Month

age in Hospitals" was next outlined in a paper prepared by Sister M. Patricia, St. Mary's Hospital, Duluth, and in a brief talk on "Accounting in Small Hospitals," W. W. Stone, of Ernst & Ernst, public accountants, St. Paul, presented the fundamentals of an accounting system that would apply to hospitals and showed the advantages of the system. A point brought out was the importance of standardized accounting methods, which would enable hospitals to make comparisons and exchange valuable information.

The concluding paper was an interesting account of the organization and administration of a hospital pharmacy by Fannie Seigal, pharmacist, St. Luke's Hospital, St. Paul.

The social features of the meeting included a luncheon, when the speakers were George Glick, attorney, Duluth, Rev. W. J. Barr and Dr. Charles Ingerson, coroner of Ramsey County, St. Paul, who explained the legal aspects of hospitalization. On Friday evening at the banquet session Dr. E. L. Touhey, St. Mary's Hospital, Duluth, admirably filled the role of toastmaster and the speakers were Rev. F. W. Powers, Duluth, who spoke on the relationship of the physician, the hospital and the clergy, and Dr. MacEachern, whose subject was nursing education and its different angles.

On Saturday afternoon motor trips around Duluth were arranged for the delegates and the meeting ended with visits to St. Luke's, St. Mary's and the Webber hospitals, Duluth.

Rev. Herman L. Fritschel, superintendent, Milwaukee Hospital, Milwaukee, Wis., was present at the meeting as the delegate of the Wisconsin Hospital Association, and brought the greetings of the neighboring association.

Dr. Mariette was elected president for the coming year and Dr. Smelzer was reëlected secretary and treasurer.

WHEN THE LEVEE BROKE—

The King's Daughters Hospital, Greenville, Miss., was erected in 1926 and thrown open in February, 1927—only a few months ago, and yet in that brief period disaster has almost overtaken it. For this institution is one of the many that stands in the heart of the Mississippi Valley, recently so tragically engulfed by the mighty waters of the Mississippi River.

The foundation of the King's Daughters Hospital, a modern four-story structure, was laid on piling when the building was erected, and to that fact is due its stability and security during the flood that has surrounded it. The hospital stood in four to six feet of water for more than five weeks. There was four feet of water in the lobby, but fortunately the water did not reach the rooms and offices on the first floor, and little damage was done to the building, although great inconvenience was suffered from flooding of the boiler rooms, which cut off the steam pressure used for heating, cooking and sterilization.

In spite of serious handicaps, the hospital, with the aid of the Red Cross is still functioning up to standard in each department, having its full quota of trained nurses and other employees, all working to alleviate the sufferings of victims of the flood. The welfare of maternity cases is receiving especial care and attention. Twenty-five babies have been born in the hospital since the levees broke and prompt and efficient care has been given to the mothers and babies.

But the financial position of the hospital is critical. Resources are cut off and paying patients cannot reach the institution. The period of rehabilitation will be a long, tedious and expensive one. For the next six months the hospital must safeguard the lives of those who have remained on duty during perilous times and have given ungrudging service.

The serious condition brought about by the disaster makes it impossible for the hospital to meet its obligations without outside financial assistance. The sum of $10,000 is being sought to finance the hospital and keep it in operation, ready to meet the demands that may be made upon it in case epidemics of typhoid, malaria or other diseases break out in the territory near it. Up to the time of the flood disaster the hospital was self-sustaining and had an average of seventy-five patients, 10 per cent of them charity patients.

The King's Daughters Hospital is one of many that have suffered hardship in the stricken districts and have yet continued to render medical aid under difficulties.

King's Daughters Hospital, Greenville, Miss., which was surrounded by water about six feet deep for over four weeks. Many rare shrubs and evergreens were destroyed.

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News of the Month

WESTERN HOSPITAL CONVENTION IS "ROUND TABLE" CONFERENCE

THE Western Hospital Association met at Los Angeles, Calif., May 31 to June 3, inclusive. This organization embraces the states of California, Oregon, Washington, Nevada, Idaho, Utah, Arizona, New Mexico, Texas, Colorado, Wyoming, Montana and the province of British Columbia.

The meeting place was the Ambassador Hotel which, with its ample accommodations, made an ideal setting. Connected with the hotel is a spacious auditorium available for the exposition and meetings. The exposition was an unusually extensive one, there being approximately one hundred interesting and instructive exhibits. About two hundred delegates attended the meetings of the various sessions.

The meeting was called to order promptly by President W. F. Vail, superintendent, Pasadena Hospital, Pasadena, Calif., and all the sessions were carried through with enthusiasm and keen interest.

The opening program was presented by the administrative section. This session was taken up mainly with the presentation and discussion of card records, files, cross-indexing and nomenclature, led by Dr. T. R. Ponton, superintendent, Hollywood Hospital, Los Angeles. Dr. Ponton presented a unique system of records and particularly a loose-leaf cross-index system which provides in a compact manner the entire data required for indexing various diseases. The system eliminates the large number of cards usually required. In addition it provides the data for statistical and annual report purposes.

Associated with this system is the Ponton nomenclature of diseases, which is unusually simple to follow, fits in with other systems already in use and is all-embracing inasmuch as it provides a nomenclature for operations.

Trustee Section of Especial Interest

At the trustees' section the discussion was led by Joseph P. Howe, president, Pasadena Hospital Association. Mr. Howe outlined the serious responsibilities of trustees, and emphasized the fact that the first consideration in hospital service should always be the care of the patient. Dr. Malcolm T. MacEachern, director of hospital activities, American College of Surgeons, Chicago, in discussing the subject, urged that all members of the board attend meetings regularly, carry out their assignments diligently and promptly and at all times be familiar with their institutions, so as more intelligently to exercise their judicial functions. A large number of trustees were present and took part in the discussion and this was probably the most interesting session of the conference.

Wednesday morning's session was combined with the meeting of the California State Dietetic Association, with Helen B. Anderson, La Jolla, presiding. Two important subjects were discussed—minimum standards for dietitians in approved hospitals, by Dr. MacEachern, and the education of the dietitian by Effie I. Raitt, head of home economics department, University of Washington, Seattle, Wash. Dr. MacEachern outlined the minimum standards for the dietetic department in approved hospitals as suggested by the American College of Surgeons. Miss Raitt clearly and by means of charts explained the broad training that a dietitian should have. She referred particularly to the knowledge the dietitian should have of food administration, purchasing, storing, budgeting of costs, dietotherapy, and the many other phases necessary to round out the dietitian's training.

The medical section of the conference convened under the leadership of Dr. Charles D. Lockwood, Pasadena, with Dr. MacEachern conducting the round table on medical staff problems. The discussion hinged chiefly around the best methods of promoting better understanding between medical staffs, boards of trustees, superintendents and personnel of hospitals. It was the general opinion first, that there should be close contact between these three groups and, second, that joint meetings of representatives from the various groups is advisable.

Series of Charts Explains Nursing Problem

On Thursday the nursing session was held, Anna C. Jamme, Director of Bureau of Registration of Nurses, presiding. The first address was given by Dr. May Ayres Burgess, director of study, Committee on the Grading of Nursing Schools, New York. Dr. Burgess, by means of a series of charts, developed from recent investigations made by her committee, answered many of the questions centering around the nursing problem today. This information was gleaned from a study as to what doctors and patients wanted from nurses and what nurses themselves thought of their job. It was clearly shown that the registered nurse, when available, was preferred by patients and doctors, and that the twenty-four hour duty was not satisfactory in many places outside of one or two states, Illinois having 23 per cent twenty-four duty service and Massachusetts 14 per cent. Dr. Burgess' presentation of facts from actual findings was convincing and showed the need of a study of this kind before further conclusions were reached.

Does Social Worker Need Nursing Course?

The social service section of the conference was presided over by Ruth Cooper, Los Angeles General Hospital, Los Angeles. This was a largely attended and interesting session. Considerable debate arose as to the education of the social worker. Some claimed that a hospital social worker should have a nursing course as one of the basic requirements for her work; others were not of this opinion. All were agreed, however, that every social worker should have a special course in social service work in a recognized college.

Dr. MacEachern gave a resumé of what he considered should be the scope of hospital social work and emphasized the need for this work in every hospital whether private or public. He stated that the practice of confining social work activities entirely to the charity patient is too common and that social work applies in various ways to all types of patients whether rich or poor.

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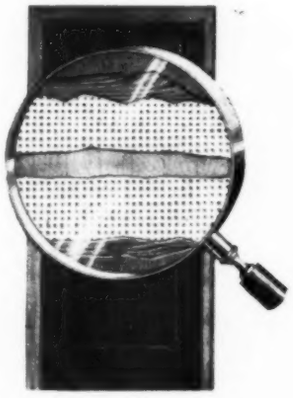

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President Vail presided at the banquet on Thursday evening. The first speaker was Dr. MacEachern, who gave a complete summary of what various organizations were doing for hospitals. This included a brief review of the work of the American College of Surgeons and the American Hospital Association and references were made to the work of the council on medical education and hospitals of the American Medical Association. Dr. MacEachern stressed the importance of all hospitals making sure that the institutions were thrown open only to members of the regular medical profession and that all irregulars or cultists were kept out of approved hospitals. In support of this he referred to the recent decision of the Supreme Court of Texas in connection with the John Sealy Hospital, Galveston, Tex.

Dr. MacEachern's address was followed by an inspiring talk on hospital service by Mrs. Gertrude Nelson Andrews.

The conference ended on Friday, June 3, with a pleasure trip to Mount Lowe following a business session in the morning. At the business session the constitution and by-laws and other matters were discussed. It was decided to reëlect the officers for the coming year with additional trustees from the states not already represented.

Dr. William H. Walsh, executive secretary, American Hospital Association, Chicago, E. Muriel Anscombe, superintendent, Jewish Hospital, St. Louis, Mo., Margaret Gray, director of nurses, Jewish Hospital, St. Louis, Mo., Mary M. Roberts, R. N., editor, *American Journal of Nursing*, New York, Matthew Foley, managing editor, *Hospital Management*, Chicago, and Dr. May Ayres Burgess, New York, were among the visitors from outside the association area, all of whom took an active part in the meeting.

SOCIAL WORKERS HOLD PROFITABLE ANNUAL CONFERENCE

The ninth annual conference of the American Association of Hospital Social Workers was held at Des Moines, Iowa, May 9 to 14, at the time of the National Conference of Social Work.

Mrs. Charles W. Webb, director of social work, Lakeside Hospital, Cleveland, in her presidential address, gave a review of the organization and growth of the association. She analyzed the organization of standing committees and roughly divided them into two groups—the professional study group and the functional group. The interrelationship of these groups, she said, together with the concerted efforts of individuals and districts will shape the future success of the association as a professional force.

A paper on "Case Work with Hospital Children" was presented by Kathleen Allen, Harper Hospital, Detroit, Mich., who outlined the case work technique in a children's ward which draws its patients from both metropolitan and rural areas. In her plan for solution of some of the problems Miss Allen looks far beyond the present and recommends:

1. Opportunities for field work in rural areas for students in schools of social work.
2. Better interpretation of community organization and responsibility to nurses in training, especially to those going into rural and public health training.
3. Better courses of medical social work in the medical schools in order to insure the maximum use of community resources and social interpretation of certain medical problems.
4. The establishment of a system of hospital aids, in areas where there are no organized social agencies, instructed in an annual or semi-annual institute at the hospital.

Nelda Weathers, James Whitcomb Riley Hospital, Indianapolis, Ind., gave a brief report of the Indiana plan, and the activities of the state workers who are able to make the home and community contacts in the counties of the state.

The topic discussed by Margaret Shedd, Mayo Clinic, Rochester, Minn., was the correspondence case work done at the Mayo Clinic over an unlimited geographic area in both rural and metropolitan districts, and Beatrice Hodges, University of Nebraska Hospital, Omaha, Neb., told of the case work methods in use in a western state in which many communities have no organized social agencies.

A joint meeting was held with the Association of Psychiatric Social Workers when a paper on "Opportunities for Psychiatric Social Workers in General Hospitals and Dispensaries" was read by Katherine Moore, formerly director of psychiatric work, Mental Hygiene Clinic, Michael Reese Dispensary, Chicago. Miss Moore gave the history of psychiatric and mental hygiene clinics in general hospitals and dispensaries, the organization, personnel and inter-clinic relationships. Her general conclusions were:

1. That the personnel in a psychiatric clinic in a general dispensary is the same as in any psychiatric clinic.
2. That case work offers the foundation of psychiatric social work in such a clinic.
3. That there will be increased opportunities for psychiatric social work in such clinics.
4. That there are particular advantages to the psychiatric social worker in such clinics.

Three round table meetings were held, giving scope for discussion on field work teaching to students in medical social service; teaching hospital social work to pupil nurses and the subject of records.

Mrs. Charles W. Webb was reelected president of the association for the coming year.

DR. HUME TO STUDY ACTIVITIES OF POST-GRADUATE HOSPITAL

Dr. Edward H. Hume, recently president of Yale-in-China, has been engaged by the New York Post-graduate Medical School and Hospital, New York, to make a comprehensive investigation and report upon its activities, present and future. Dr. Hume will devote several months to this survey and it is expected that his study will result in a better understanding of the reciprocal obligations of the Post-Graduate Medical School and Hospital, the medical profession and the public, according to the *Medical Journal and Record*.

Quiet

McKINNEY friction control HINGES

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Another feature of tremendous importance to hospital boards is that this McKinney Hinge requires no upkeep. If after years of service it is desirable to increase the resistance, a turn or two of an ordinary screw-driver brings it about. And in doing this the door is automatically raised from the threshold and brought back to its original position.

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YOUR EVERYDAY PROBLEMS

A department devoted to the informal discussion of problems arising in the everyday life of the hospital superintendent.

[No attempt has been made to offer final conclusions relative to the questions considered in this department. THE MODERN HOSPITAL will gladly welcome further comment by its readers on any of these problems, or the presentation of other queries for discussion in later issues.—Editor.]

Should the Hospital Carry Malpractice Insurance for X-Ray Operators?

The degree to which the hospital is responsible for the acts of its agents or employees is a matter that has aroused considerable discussion in hospital conventions and journals. Most physicians carry individual malpractice insurance.

The possibility of burns, resulting from the therapeutic and diagnostic employment of x-rays, makes it advisable for some protection to be given to the hospital and its x-ray operator. It is probable that should an accident of this sort occur (and this possibility should not be minimized) a suit would be instituted not against the hospital but against the person who actually directed this treatment. The same may be said of the use of radium within the hospital.

One hospital has at but inconsiderable expense taken out a ten thousand dollar insurance policy, to protect the physician handling its radium and x-ray from malpractice suits.

It may be stated that a charitable institution cannot be made a subject for a suit for damages, but in spite of this fact it seems best for the hospital to do all in its power to protect the reputation and interests of its physicians, who are willing to handle dangerous physical agents in the treatment of patients within the institution.

How Can a Saving of Laundry Soap Be Brought About?

It has been estimated that hospitals spend about sixteen dollars per bed per annum for laundry supplies. The bulk of this expenditure is usually for soap. There are possibilities for great waste in the purchase of this commodity.

In the first place the efficacy of soap can be proved only by actual use, and even then accurate testing is difficult.

Many superintendents purchase well known standard brands of soap and feel that it is an economy to do so, even though the unit price is higher than that of some nondescript brands. For example, in the purchase of cake soap, a well known and reliable brand will cost about six dollars a case of one hundred cakes, each weighing 138 grams or about four and three-fourths ounces. Other soaps can be purchased for one and one-half dollars less a case, each cake having about the same weight as in the former instance.

How may a superintendent reach any conclusion as to the economy of purchasing either of these articles for use in his institution?

It is a recognized fact that the weight of soap cannot be used as a criterion of the economy of its purchase. Uncured soap contains much water and is expensive to use. On the other hand, the amount of water in each cake of any two brands may be the same, but insoluble matter, such as the carbonates, may add to its weight but not to its efficiency in actual use.

A certain superintendent in trying to solve this problem obtained a chemical analysis of three brands of soap, which may be called A, B and C. Brand A cost $3.90 per case, brand B, $5, brand C, $6. The analysis he obtained was as follows:

	A	B	C
Moisture	24.9%	24.1%	13.8%
Weight per cake	136 G.	178 G.	158 G.
Dry soap per cake	88.5 G.	120 G.	117 G.
Crude fatty acids	63.4%	71.2%	79.8%
Na2 O as soap	2.33%	6.46%	7.08%
Alcohol insoluble	1.98%	2.58%	2.46%
Na2 O as Na2 Co3	.41%	.60%	.33%
Actual soap per cake	86.7%	100.1%	97.5%

It will be noted that brand C, which was the most expensive soap, contained a trifle over half as much moisture as either of the other articles, that brand B weighed twenty grams or two-thirds of an ounce more and possessed three grams more dry soap per cake than brand C.

It will be noted also that the cheapest brand, A, had but slightly more than four-fifths as much actual soap as brands B and C, that it contained less crude fatty acids in the ratio of 63 to 71 to 79, and that it contained about one third as much Na2 O as soap, as the other two.

As a result of this chemical analysis, the superintendent decided that it would be economical for him to purchase brand B although it was a less known brand than brand C, and was manufactured by a company of which he had no knowledge, hence in which he possessed less confidence than in the company manufacturing brand C. He discarded brand A because although it was less in price, he did not feel that the chemical examination denoted that it was worth even the price charged for it.

Superintendents who have this problem presented to them, should, if no chemical laboratory is available in their hospitals or in the immediate vicinity, send their samples to the National Bureau of Standards at Washington, D. C., for a chemical examination. The price for this service is usually small in proportion to the value of the information gained.

In regard to chip soap, which is the article used in the laundry proper, the same sort of study can be made.

Salesmen are usually willing to have the laundryman conduct his own test in regard to the amount of soap required per washer to cleanse clothing satisfactorily. This test is useful, but should not be accepted except to aug-

Hyperacidity of gastric contents is not so much an indication of over-production of acid as of failure of neutralization.

Neutralization in Gastric Acidity

"Phillips' Milk of Magnesia" promptly counteracts hyperacidity, acidity of the mouth and other obvious manifestations of acidosis. When the natural factors of neutralization (food, saliva, secretion of the pyloric end of the stomach and regurgitation of duodenal contents through the pylorus) fail to neutralize the gastric content, there is a need for "Phillips' Milk of Magnesia." A given quantity neutralizes almost four times as much acid as a saturated solution of sodium bicarbonate and nearly fifty times as much as lime water. Further it has the additional merit of being a laxative, a quality of importance since constipation is so frequently the underlying cause of hyperacidity.

ASSURANCE

Hospitals at all times are assured a uniformity of quality and efficacy by avoiding imitations. "Phillips' Milk of Magnesia" bears our registered trade mark. Insist upon it by name. Obtainable in 4-ounce (25c bottles), 12-ounce (50c bottles), and 3-pint hospital size from druggists and supply houses everywhere.

PHILLIPS' Milk of Magnesia

"Milk of Magnesia" has been the U. S. Registered Trade Mark of The Charles H. Phillips Chemical Co. and its predecessor Charles H. Phillips since 1875.

THE CHARLES H. PHILLIPS CHEMICAL CO., New York and London

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ment the chemical examination of the article being studied.

Soap can be saved if the gaskets on the bottom of washing machines are kept tight, so that the contents of the washer do not escape into the sewer before they have had an opportunity to be brought into contact with soiled clothing. It can be saved by having a definite formula per washer, and weighing or measuring the amount used each time the cylinder is filled. It can be saved by having a chemical analysis made of the water used, and by the installation of a water softener, if this examination indicates that the water contains so much mineral matter that soap is being wasted.

It is a good plan to purchase soap, particularly if it is cake soap, some time before it is needed, in order to cure it before it is used. Green soap is an extravagance, and undependable salesmen sometimes will permit it to enter a lot purchased, because of its increased weight. This is particularly true when soap is bought by the pound.

Should the Patient Be Told of the Nature of His Operation?

It is not a rare circumstance for a patient to be admitted to the hospital with symptoms of an acute abdominal condition, for example, and for the physician to learn that a previous operation, of an unknown nature, has been performed. Ofttimes he must fall back upon the well-known statement that an "acute abdomen," in the absence of a scar, is most likely to be caused by an inflammation of the appendix vermiformis, and that, on the other hand, when symptoms of an acute abdominal condition exist and a scar is present, intestinal obstruction is the most likely condition.

One ingenious yet impractical doctor, has recently suggested that every surgeon, in closing his abdominal incision, should tattoo into the skin adjacent to the wound the nature of the operation performed. Reference has been made to this recommendation simply to stress the need for some arrangement whereby the patient who has been operated upon, perhaps years earlier, may have information in regard to the nature of the surgical procedure carried out. Ofttimes the emergency is so great that the patient's life may actually depend upon the surgeon then in charge quickly securing information as to previous surgical illnesses or operations. To telegraph the superintendent of a hospital in a distant city for this information is often unsatisfactory. If time is available, to request a copy of the records from the hospital in which the patient had been previously treated is frequently productive of results; but when a serious surgical emergency arises time is not available for securing information in this way.

Some abdominal surgeons make it a practice, upon the discharge of a patient from the hospital, to supply a form certificate, setting forth briefly in medical terminology the surgical procedures carried out. This practice, of course, has its objections, not the least of which is the furnishing of facts to the patient himself, which may be disturbing, or to relatives and friends who will use this information for improper purposes. This is particularly the case in regard to operations on the female genito-urinary tract.

If it is not felt best for the hospital to pursue this practice, then there should certainly be available at all times a card index, to which a hospital clerk could refer in answer to telegraphic or telephonic requests for information.

Even although the former solution to this problem may have its faults, it is felt that the patient has a right to know what surgical conditions were found and how they were remedied, because this information may not only be immediately satisfying to him, but in years to come it may be in reality life saving.

What Percentage of the Hospital's Daily Cost Should Be Spent for Food, Its Preparation and Service?

The editors of THE MODERN HOSPITAL have been asked this question by several institutions. In attempting to draw up its budget, the board of a newly organized hospital is often at a loss to know how much money should be set aside for providing food for its patients and employees. The answer to the query depends upon the type of the hospital and upon the wealth of its clientele. The local labor conditions, the methods of food service in vogue, as well as the size of the hospital, are also factors that enter into this problem.

When the average cost of maintaining a hospital bed in the almost 7,000 hospitals in this country was $4.71 a day, the cost of food per patient per day was $.96, or approximately 20 per cent of the whole. In some institutions the cost for food exceeds this figure, and in many others, indeed, we may say in most others, it is likely to be somewhat less.

The number of private rooms in proportion to ward beds that the hospital contains will affect the cost of food per patient. Although private room service is much more expensive in every detail than ward service, when the à la carte system is in vogue and several varieties of each standard food article must be offered for selection by the individual patient, the cost of raw food is further increased.

In a certain large hospital the dietitian is budgeted as follows:

In the employees' cafeteria, which feeds approximately 450 persons who are of the orderly and attendant type, $.51 is allowed for raw food materials daily. In the nurses' dining room which provides for about 500 nurses, $.60 is allotted for this purpose, and in the doctors' dining room which feeds sixty-five or seventy persons at each meal, $.65 is allowed.

It is a good practice for the dietitian to be informed as to how much money is in her purse before she is asked to go to the market to buy food, and a per meal or per day allotment appears a practical way of budgeting the dietetic department.

From the standpoint of preparation and service the adoption of the cafeteria or self-service principle will greatly lessen this cost. For example, in the dining room of the hospital mentioned above, serving approximately 500 persons, it requires twenty maids at $55 a month to serve the meals.

If a self-service system were adopted, a considerable saving could be made. On the other hand, it is the feeling of some hospital administrators, particularly in institutions where the work is heavy, that the nurse should be allowed to take her place at the table and have the food brought to her, rather than have to wait upon herself.

In another hospital of approximately 300 beds, which has about 20 per cent private rooms, the cost of the preparation and service of food for hospital personnel and patients averages $3 per person per month. In another large city hospital, in which 1,700 patients, 400 orderlies, attendants and cleaners, and 455 nurses are fed, the cost of the preparation and service of food is $1.59 per person per month. (In this instance five kitchens are maintained).

It can be seen that there is wide variance not only in the amount of money spent for food but in the cost of

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Saves Wages
Makes Linens Last 65% Longer

Capacity Per 8-hour Day, Thor Heavy Duty Washer

2,952 Napkins or **1,368 Pillow Cases or**
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or any combination of foregoing or other articles to equal 432 lbs. dry weight, per day.

Even the largest hospitals, too—those with complete built-in laundries—are saving money with Thor equipment, for their finer, more expensive linens, counterpanes, etc. And for QUICK emergency calls for freshly laundered supplies. Also for use as auxiliary equipment in operating rooms, nurses' homes and for the dining room linens, etc., of the hospital staff. Use the coupon. Two cents now may save you thousands. No obligation.

HURLEY MACHINE COMPANY

Manufacturers of special laundry machines for laundries, hotels, hospitals, institutions, etc.

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Branches and Service Stations in Principal Cities

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Please send full information prices, etc., on Thor Heavy Duty Hospital Laundry Equipment.

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preparation and service. In the large hospital feeding 1,700 patients, to which reference has been made, the total cost of food for twelve months was $387,000, and the cost of preparation and service was approximately $54,000.

It may be roughly stated, therefore, that the cost for food is likely to approximate one-fifth of the per capita cost, and that the cost of service and preparation varies with the system of service employed—whether central service, self-service for employees or service of food to patients by nurses—depending upon the geography of the hospital, and the number of kitchens maintained.

Should the Hospital Require Nurses to Subject Themselves to the Dick Test?

It is felt by hospital superintendents and training school directresses that no stone should be left unturned in protecting the health of the student nurses in their school against all infections and contagions. It is the custom to require pupil nurses, on admission, to be immunized against typhoid fever, tested for susceptibility to diphtheria, and immunized if they react, and to have any correctable physical defect attended to, such as hypertrophied tonsils or infected teeth.

Scarlet fever is responsible for the loss of many days of the nurses' time from illness, and, during the winter months, endangers the lives of not a few members of the student body of nurses in our hospitals.

The Dick test, while of recent development, appears to be firmly established as a valuable preventive medicine method. It is the feeling of most physicians that it is reliable, and that its use in any situation where large numbers of young people are brought together is eminently justified. To test the nurse for susceptibility to scarlet fever produces no particular discomfort. If this step is routinely taken, and the records are filed for each member in the school for nurses, this information is ofttimes of value in making a differential diagnosis, should the nurse's illness simulate scarlet fever.

It does appear, therefore, that it would be a wise step to add Dick testing to the list of preventive measures, which are adopted to protect the health of nurses in training.

What Are the Functions of the Women's Auxiliary Board?

THE MODERN HOSPITAL has been asked to express its opinion as to the relationship to the hospital's personnel of the women's auxiliary board, and as to the functions of this body.

Most of these organizations are, and should be, purely advisory and unofficial in their function. Such an organization of interested and informed women can be of inestimable value to the hospital. On the other hand, this body of women if improperly organized and constituted can become harmful in its effect upon the hospital's organization.

In some hospitals the women's board has taken upon itself the business of providing and keeping in repair all hospital linens, of inaugurating and supervising donation days, of supplying many services and commodities for which no provision has been made in the hospital's budget.

This is a fine service, but these activities should be carried on in association with and by the advice of the superintendent. The chairman of this board should consult with the superintendent concerning the advisability of the inauguration of any new policy or activity in her group. She should feel that she has not the privilege to discuss with patients, or with any of the hospital personnel, matters that have any official bearing. It is here that the disquieting effect of some women's boards arises. It is when this committee serves as a path around the superintendent's desk to that of the board of trustees that lines of authority are disarranged, the superintendent's activities weakened and his authority lessened.

To the women's board or committee no actual administrative authority can be delegated, and if the members of this committee are wise, they will not allow themselves to be used as a wedge to obtain higher salaries for hospital employees, or other privileges that the superintendent has not deemed advisable.

The greatest function, perhaps, of this committee is the interpretation and explanation to the community of the hospital's aims and activities. While these women are not officially a part of the hospital, yet they can act efficiently as the hospital's spokesmen. Patients and their relatives who cannot understand why certain practices are necessary or advisable, are ofttimes more willing to accept an explanation from persons who do not receive a salary from the hospital, than from those of more official position. It is an exceedingly good practice for this committee to have an ironclad rule that none of its members shall interfere in any way either with the hospital's organization or the conduct of its scientific work, and that when appeals are made to them for intercession on behalf of patients or employees, they shall refer these persons to the superintendent.

It is also a good plan for the members of this committee in making rounds through the hospital always to be accompanied by some one in authority.

An intelligent and fearless chairman of such a committee can do much to tranquilize those who become disquieted because linens are occasionally found to be soiled, or food, cold. She can also direct the activities of persons who are inclined to be faultfinding, along lines that are constructive and helpful.

Should the Chief Dietitian Supervise Dinners Given by the Superintendent?

The question was asked by a superintendent whose dietitian had objected to the planning and supervision of a dinner that he gave in his private apartments in the hospital.

The dietitian is fast becoming one of the recognized hospital specialists, necessary for the relief of sickness. To her and to her department should go the dignity and recognition that such a position should command.

It seems that the dietitian was justified in making the above objection.

The respect of the hospital personnel for the head of the dietetic department, and for her department, depends upon the attitude, those in authority, particularly the superintendent, display toward that department. If the superintendent persists in regarding the dietitian as a person whom he can order to supervise the preparation of food for a social occasion in his home, this respect is measurably lessened.

In the case referred to it would have been better judgment for the superintendent to bring in a cateress. Most experienced superintendents feel they should avoid the utilization of any of the hospital's facilities for personal purposes, thus forestalling unfavorable criticism. To avoid asking or allowing the head of a special department to perform duties that are foreign to those that should be expected of one who is aiding in the treatment of sick people, is to elevate the dignity and usefulness of that department. The dietitian, therefore, should not be asked or allowed to perform this type of work for the superintendent or for any other of the hospital heads.

An enticing almond custard

. . . *for* patients who must be *tempted to eat*

SO often patients who *must* build strength lack appetite to encourage them to eat. In such cases, and also for patients difficult to please, one of Chicago's leading hospitals uses this enticing frozen almond custard.

The secret of the smooth creaminess and nutritive value of this frozen custard lies largely in the milk. For all recipes in which milk is as important as in this, many dietitians use a milk double-rich in butterfat—Libby's Evaporated Milk. They know that Libby's is simply full cream cow's milk from selected dairy herds, with half the natural moisture removed. In each 16 ounces there are 7½ teaspoons of butterfat—equal to a full cup of pure cream!

Not only Libby's Milk, but all of Libby's 100 Foods are widely used in successful hospitals throughout the country. To pack these foods at their best, more than 50 kitchens have been established in the world's finest producing regions.

New appetizing variety can be given to your trays with Libby's Foods. A partial list is printed below. Ask your jobber about them.

Libby, McNeill & Libby,
D-pt. N-4, Welfare Bldg.,
Chicago

Frozen Almond Custard

As all dietitians know, a very large part of the nutriment in a meal may be in the dessert. Patients who do not like plain milk or raw eggs eagerly take both when prepared in an attractive frozen dessert such as this Frozen Almond Custard. It is especially valuable on convalescent diets. It is rich but not expensive and the almond gives it an unusual, delicate flavor.

3 eggs — *½ cup water*
¾ cup granulated sugar — *1 teaspoon almond flavoring*
⅛ teaspoon salt — *½ teaspoon vanilla flavoring*
1½ cups Libby's Evaporated Milk

Beat eggs slightly; add sugar and salt. Combine with milk, to which water has been added. Cook in double boiler, stirring constantly until mixture thickens and coats the spoon. Cool, add flavoring and freeze. (Serves 8)

Libby's 100 Foods

These Libby Foods are packed in special sizes for institutions:

Hawaiian Pineapple	Pork and Beans
California Asparagus	Olives
California Fruits	Pickles
Spinach	Mustard
Kraut	Bouillon Cubes
Jams	Beef Extract
Jellies	Chili Sauce
Santa Clara Prunes in Syrup	Catchup
Blackberries	Salmon
Loganberries	Evaporated Milk
Red Raspberries	Mince Meat
Tomato Purée	Boneless Chicken

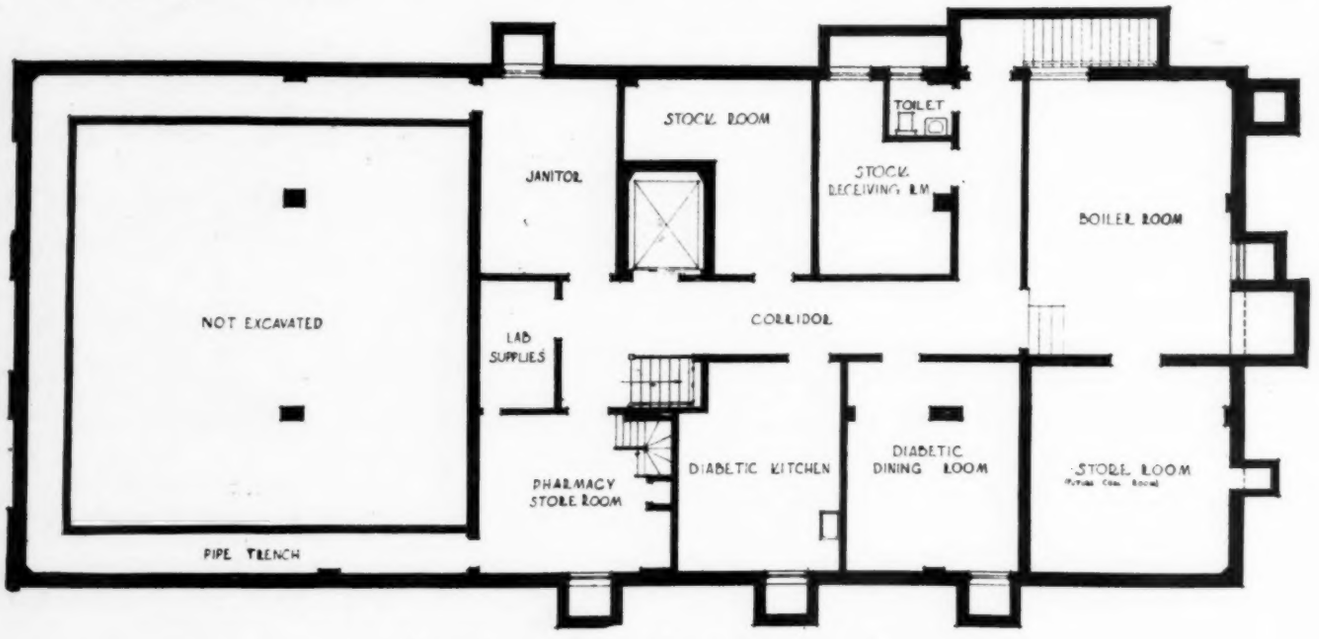
NORTH END COMMUNITY CLINIC HAS MODERNLY EQUIPPED BUILDING

By Jesse F. Hirschman,
Detroit, Mich.

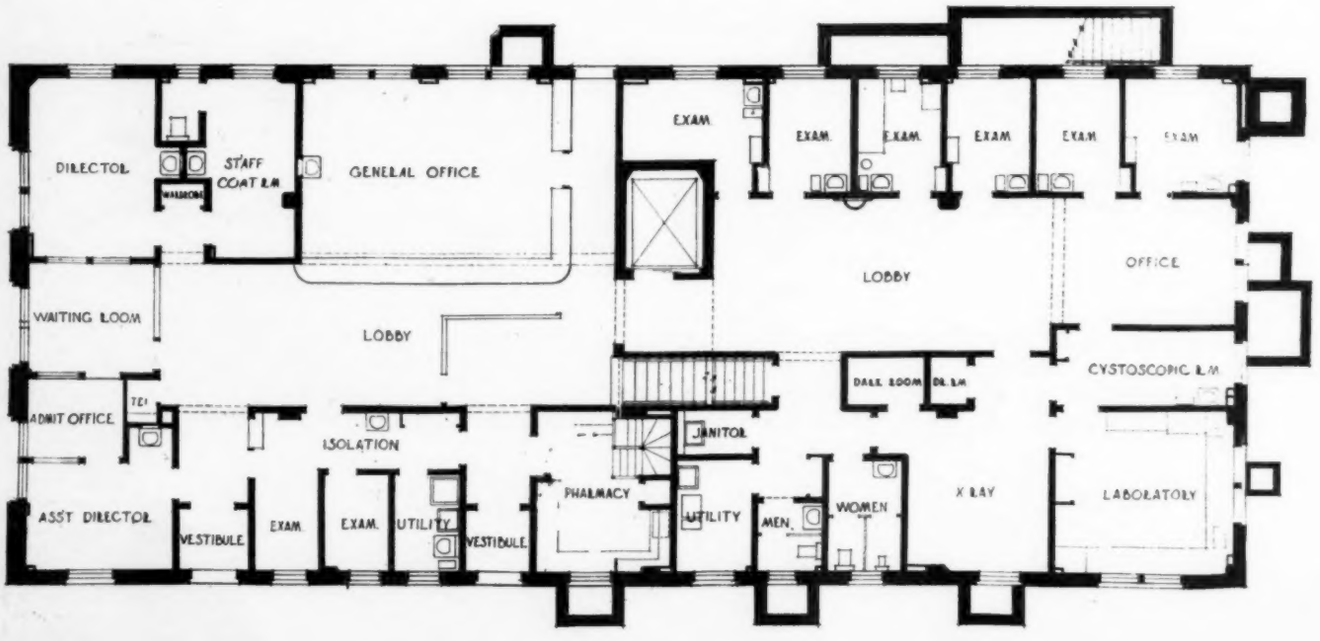
THE operation of the North End Community Clinic, Detroit, Mich., and the services performed there, were described in full in the June issue of THE MODERN HOSPITAL. Here are shown the floor plans of the clinic's new building—the Leopold Wineman Memorial Building—where the work is carried on.

This building and its fine equipment the clinic owes largely to the generosity of Mrs. Leopold Wineman, who, in memory of her husband, contributed $75,000 toward its cost, the balance of the necessary funds being supplied principally by the United Jewish Charities of Detroit. In buying the land sufficient was purchased so that an additional building could be erected thereon, or the present building extended should this become necessary.

The building is of reinforced, fireproof construction, two stories and basement in height, with provision made so that two additional stories can be added. The exterior is of brick with stone trimming. The main entrance and exit, are from the side, which allows a better interior arrangement. The building is set well back from the side lot line, insuring permanent light and incidentally allowing for a baby carriage shelter which is conveniently placed.



Above, basement plan; below, first floor plan.



"Hospital construction will show further gains during the coming year, according to the annual forecast of the Architectural Forum. . . . . The forecast shows that the requirements for hospital building during 1927 will be greater than the requirements of twelve other classes of construction . . . . . The total requirements are conservatively placed at $272,947,500."

—From the MODERN HOSPITAL.

Mary Frances Kern is an outstanding pioneer in providing Bigger, Better and More Hospitals for America.

We Are the Allies of Expansion

The crying need of the hour is for more hospital beds—more operating rooms—more therapeutical facilities. Few hospitals in the nation are entirely adequate to meet the needs of the communities they serve, or try to serve. The demand for "Bigger and Better Hospitals" is great, yet few are meeting it.

Some hospitals are burdened with debts bearing high interest rates which they seem unable to throw off. Others hesitate on the grounds of the expense. Yet America was never more prosperous—never were Americans more willing to meet their civic responsibilities, to respond to a just appeal.

Money for expansion is readily available for you. Why not take advantage of your opportunity NOW through an efficiently KERN DIRECTED FINANCIAL CAMPAIGN?

Years of experience in financing hospitals gives MARY FRANCES KERN a keen insight into exact hospital needs. Versed in the problems and requirements of the field, her counsel is invaluable in formulating a sound program of BUILDING AND EQUIPMENT. And her demonstrated methods make possible the securing of the funds desired. Her preliminary surveys are most enlightening.

Her organization is thoroughly schooled in her system. She has eliminated all "guess work" from financial campaigning.

MARY FRANCES KERN offers you sage advice on your individual problem. It costs you nothing to consult with her. If your hospital needs to grow, the first step is to communicate with MARY FRANCES KERN.

(Even if yours is a privately owned institution, write or wire us and we can solve your problems.)

Mary Frances Kern

FINANCIAL CAMPAIGNS

1340 Congress Hotel, Chicago, Ill.

Many Hospitals have grown through using our services.

HOW TO EQUIP A HOSPITAL WEAVE SHOP

By Mary M. Atwater,
Cambridge, Mass.

HAND weaving is taking an increasingly important place in hospital occupational therapy and in pre-vocational training. In fact, a large proportion of well equipped hospitals now have looms and a weaving shop of some sort. The reason for this is fairly obvious, for no other craft offers so much discipline, so much interest, or such varied possibilities, while at the same time giving a valuable kind of bodily exercise.

The work in some forms is simple enough for greatly enfeebled patients, and yet it may be as difficult and complicated as one pleases. It is possible to grade the occupation exactly so that those capable of making progress can be taken from one step to the next in a definite and satisfying manner. Moreover, the articles produced have real cash value, whether they are sold or used for institutional purposes.

As hand weaving equipment is rather costly, it should be selected with care, used only for the types of patients most likely to profit by the work, and supervised by an aid who has had technical training and practical experience.

Often the first loom purchased for hospital use is a small two-harness rug loom, on which "hit and miss" rag rugs of an inferior sort follow one another in a dismal procession. The second loom purchased is likely to be another of the same kind, and perhaps even the third, fourth and fifth also.

It does not seem to be generally realized that simple "four-harness overshot" pattern weaving is more interesting, and actually easier, than good plain weaving. For this reason it would be better if the first loom were a four-harness treadle loom on which many different things could be made. The endless production of poor rag rugs is a hopelessly stupid business and has in it little or no curative value except for the physical exercise involved. A low grade mental case who needs to be kept busy at a simple task requiring bodily effort might be set at digging ditches or shoveling sand with just as good results and at a much lower cost; he does not need a loom to work on. Patients capable of progress derive little profit from low grade weaving.

Two-Harness Loom Is First Step

Of course in a shop where a number of looms are installed one at least should be a simple two-harness loom, to be used as a first step. Here other looms on which more interesting things are being made supply an incentive and make even the rug work seem attractive.

There are a number of good four-harness treadle looms on the market and there are some of an inferior type. In making a selection the following points should be noted: Let the frame be of hard wood, strong, well braced and not too light. The ratchets and pawls on warp-beam and cloth-beam should be strong, and a heavy batten with a good shuttle-race is desirable. The harnesses work more evenly and require less adjustment if hung over rollers rather than over pulleys or "horses." For four-harness work there should be four lamms and six treadles. Note the attachment of the treadles—the longer the distance between the beam to which the treadles are fastened and the point where they are attached to the lamms, the easier the loom will be to operate. For convenience and speed in warping, a sectional warp-beam is an advantage; and for convenience in threading, wire heddles and standard heddle frames should be preferred. The last two recommendations are made in the full knowledge that many weavers prefer to put on a warp in the ancient fashion—even if it does take three days instead of three hours—and like string heddles for the attractive appearance of a loom set up in this fashion, even if it takes much longer to thread and to check.

The so-called non-harness looms are not practical equipment for a shop. Automatic looms and fly-shuttle looms, although they do not belong in a craft shop, are good equipment for a pre-vocational weave shop, and can be used for the making of toweling, clothing material and simple rugs in quantity for institutional use. They are rather heavy to operate and should be installed only in shops where men are employed.

Looms Recommended For Small Shop

For a small weave shop, to be equipped with several looms, the following list is recommended:

Loom No. 1. A two-harness treadle loom, weaving 42 inches wide, to be used for rugs of burlap or other waste material.

Loom No. 2. A two-harness treadle loom, weaving 36 inches wide, to be used for bath mats in cotton chenille or rug yarn, with borders in stripes, arrow heads or "set in" pattern effects.

Loom No. 3. A four-harness treadle loom, weaving 42 or 44 inches wide, to be used for rugs woven in a pattern, either of rags, of cotton roving, chenille or woolen rug yarn. (This is the loom to be bought first if one loom only is purchased in the beginning).

Loom No. 4. A four-harness treadle loom, weaving 28 or 32 inches wide, to be used for weaving pillow tops, table runners, curtain material and similar articles.

Loom No. 5. A two-harness treadle loom, weaving 42 inches wide, to be used for all-wool dress fabrics set in a plaid pattern, also for scarfs and simple baby blankets.

Loom No. 6. An eight-harness treadle loom, weaving 42 inches wide, to be used for "linsey-woolsey" dress fabrics, for elaborate coat weaves, for coverlets, and table linen.

Each loom should be equipped with a sufficient number of heddles—thirty for each inch in weaving width—and with reeds with various numbers of dents to the inch. Looms 1, 2, and 5 should be regularly provided with twelve-dent reeds, and looms 3, 4, and 6 with fifteen-dent reeds. The equipment of the shop should include at least one ten-dent reed, one eight-dent, one thirteen-dent, and one twenty-dent reed to allow a variety of "settings."

Weave shop equipment should also include two spool racks of sixty-spool capacity each, a warping board or warping mill, two large upright swifts, a hundred or more spools — either large wooden spools or paper tubes — a dozen throw shuttles and two hundred shuttle bobbins, a dozen ordinary rug shuttles, a number of lease sticks, a winding device of some sort for spooling warps and winding shuttle bobbins, benches for weavers who prefer to sit at the loom at least part of the time, scissors, tape measures, a box of pins and a tool kit.

A shop equipped as above will provide occupation for eight or ten patients of different grades, and will pro-

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EVERY nurse knows that ginger ale may often be given to advantage in convalescent cases and in stomach conditions where patients are unable to retain nourishment. But have you observed that there are two distinct types of ginger ale—Golden and Pale Dry—and that one is better suited than the other to the diet of the sick?

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Nurses should insist on a Golden, not a Pale Dry ginger ale. Its mellow, well-rounded flavor is more gently stimulating and is better relished by the patient.

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vide an orderly progress from simple to complex. In addition, if waste material is used large groups of low grade patients may be employed on the wards or elsewhere in the preparation of material, such as raveling burlap or cutting and sewing carpet rags. The patients employed in the shop, in addition to those working on the looms, can do the winding, the tying of fringes and similar tasks.

Cost of Equipment

The cost for the equipment of such a shop as is here described will be about $350. The cost of a suitable stock of materials depends so much on qualities and quantities that it is impossible to give a figure without going deeply into detail; however, an allowance of $50 for materials will provide warp and weft for a large quantity of work.

The most costly item in the expense sheet of a hospital weave shop is apt to be the lack of technical training and practical experience on the part of the aid in charge of the work. There is nothing more worthless than a poor piece of weaving, and nothing that can waste expensive materials at so ruinous a rate as a hand-loom misused. Poor work is bad economically, and is even worse from the point of view of its effect on the patient. Even a patient of low mentality feels the unsatisfactory quality of poor work and suffers the depressing effect of failure. For these reasons the weave shop aid should be selected with even greater care than the equipment.

Under proper guidance a well equipped weave shop will more than pay for itself in actual sales, and will turn out large quantities of material for institutional use. The value of the work as a part of the rehabilitation program need not be emphasized here; it is well recognized and has been proved by experience.

WHY THE HOSPITAL IS THE BEST HEALTH CENTER

In a recent issue of *Hospital Social Service*, Dr. Charles P. Emerson, M.D., dean, Indiana University School of Medicine, Indianapolis, points out some of the ways in which the hospital serves as a great health center for the community at large. He says in part:

"Today the treatment of a patient in a hospital ward has far greater significance than the mere treatment of that patient, fine though that may be. In that ward the doctors, nurses, dietitians, and social workers of the future receive their training, and while the future career of each will be directed to the care of the sick, yet the greatest contribution of each will be the education of the community in matters of disease prevention and especially in methods of increasing physical efficiency; and all will be powerful forces in shaping public opinion in the interest of health.

"In short, the care of each patient is the least of the hospital's service, for treat one patient well, and you have treated one patient well, but show a doctor, a nurse, or a social worker how to treat that patient well, and you will have helped all the future patients that student will treat, and you will have strengthened his future influence in the cause of health in the community in which he or she later practices.

"Today we feel that all nurses and medical social workers while engaged in any practical medical work should be more closely related to a responsible hospital staff organization. In reply to the question which doubtless now is on the lips of many, whether, granting that such desired relationship is not possible, the nurse or social worker should stop her work, we would express the opinion that she should proceed, but that the technical medical aspects of the work be greatly curtailed. There will be plenty of splendid social work to keep her more than busy. Unfortunately, one of the great temptations of each of us is to essay professional work a little beyond our depth. This is a dangerous sport. As we shall endeavor to show later, the great danger of American medicine today is the practical application of so much popular medicine by those who, whether doctors, nurses or neither, are eager to do good, yet have not the training to meet their problems without supervision.

"Among the health center activities that each modern hospital now accepts as unescapable moral obligations are the prenatal clinic, a most profitable health venture which prepares the mother to withstand her approaching ordeal with as much safety as possible, and gives the expected infant a better chance for a normal birth and for a healthy life; classes where mothers receive instruction and advice; child welfare clinics, and classes for nervous patients, where the neurasthenic and psychasthenic may receive encouragement, and the incipient insane may be helped to recover without danger of commitment. Thus it is that the modern hospital has indeed become a health center."

MOTOR HOSPITALS RELIEVE EYE SUFFERERS IN THE DESERT

Upon the ancient soil of Pharaoh, the land of eye troubles, travel daily several up-to-date and fully equipped motor hospitals to wage war against the great eye scourge that prevails in many inaccessible towns and villages throughout the broad stretches of desert land. Dr. Arthur F. MacCallan, a famous British oculist, heads this mission of mercy.

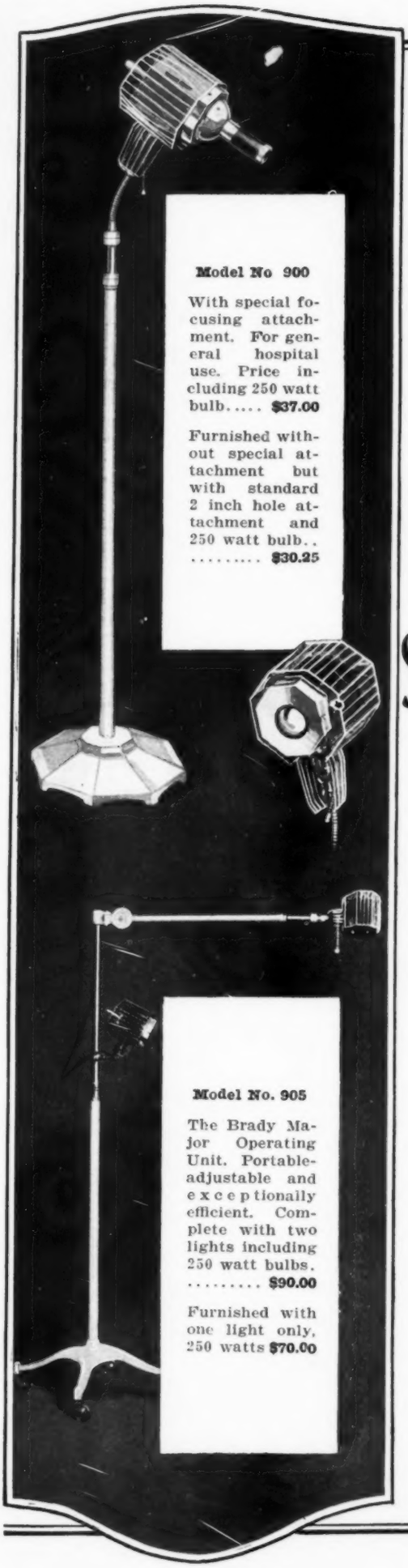
The number of these motor hospitals is now twenty. They travel all over the desert land, establishing temporary camps, where inhabitants are brought in for treatment.

The doctors and the male attendants live almost a gypsy life, do their own cooking and washing, treat the patients of a certain village and then pack up and move to the next settlement. Among the desert hospitals, there are already fifteen permanently established headquarters fully equipped with every modern instrument found in a European hospital. Also there are five clinics on wheels, which travel through the deserts visiting oasis settlements.

Three of these motor clinics have complete sanitary outfits, which are capable of meeting any emergency during the performance of a difficult operation.

The Egyptian climate makes life miserable for the nomads. In January, cold is quite severe on the borders of the Nile River. For fifty days before the equinox, the great Khamsin winds blow constantly and they raise impalpable sand storms, which are the chief agent for eye troubles. In June the torrid heat melts the butter even in the thermos jars. Therefore, open air practice is given up completely by the traveling doctors until late in the month of October.

In 1925 the number of patients treated for iritis, cataracts, glaucoma and trachoma amounted to 147,492. Last year, according to a government report, at least 12,524 patients with cross-eye and 4,850 blind persons presented themselves for treatment in the moving hospitals; in other words, twelve out of 100 persons in Egypt are sufferers from eye disease. Hence the great necessity for these moving hospitals.—*Hygeia.*



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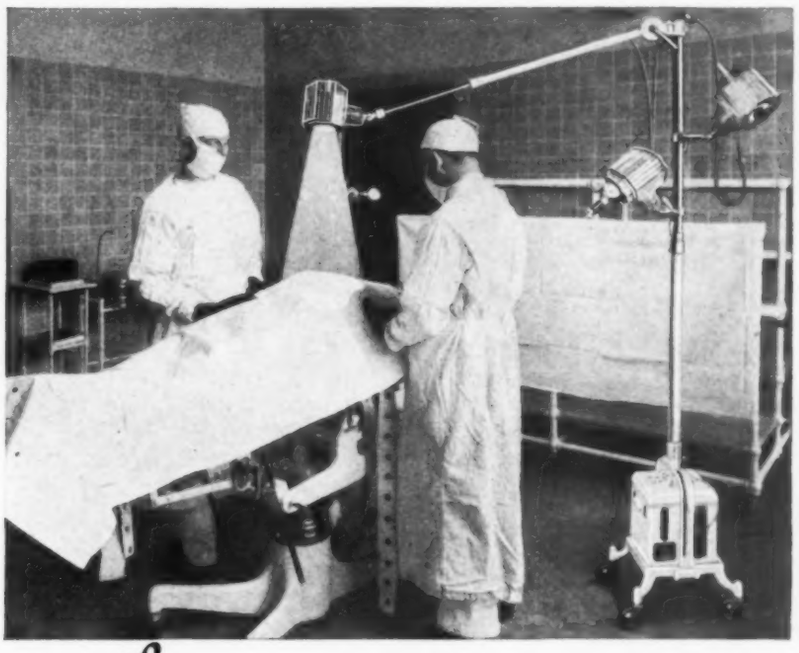

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SHOULD SPECIAL NURSING SERVICE BE PROVIDED FOR WARD CASES?

IN the eighth annual report of the Providence City Hospital, Providence, R. I., appears the following item—interesting as a fact and far-reaching in importance:

"On May 5, 1921, Dr. Henry B. Moore lost a child from diphtheria at the City Hospital. He was so touched by the care taken of the child that he suggested starting a fund for paying for special nurses for children in the hospital, when it was believed that it would be a comfort to them or to their parents, and donated $100 as an initial sum toward that purpose."

This little news item, gleaned from an inconspicuous corner of an annual report proves the possibility of capitalizing on the practice of providing free, special nursing service when needed. It is the feeling of some of the leaders in the field that an important phase of hospital work, that of providing special nurses for ward patients in needy cases, is being overlooked or minimized by some of our institutions. These men appreciate the gradual extension of this activity but they believe that the growth of the practice is in no way as rapid as the need. It is felt that if its adoption is not more universal the absence of needed special nursing service will become a recognized lack in hospital work.

Practice at Presbyterian Hospital

In an effort to determine how widely this practice obtains and to what extent some of the more important hospitals afford special nursing service to ward patients, THE MODERN HOSPITAL recently asked for expressions of opinion on the subject. Among the many interesting replies is one from Asa S. Bacon, superintendent, Presbyterian Hospital, Chicago, telling of the success he has had in seeking endowments to cover the expense of special nursing service. He says in part:

"About ten years ago I realized that in order properly to care for a certain number of patients who needed special nursing service and were unable to pay for it, some provision should be made. To this end I interested a wealthy lady, with the result that we received an endowment for one nurse. I have been pushing the matter ever since and at the present time have two endowed nurses both of whom are kept busy at all times giving special nursing service.

"However, I do not stop there, for if a patient in our wards needs special attention following a serious operation, or for any other reason, a nurse is put on duty for twenty-four hours and charged to charity."

This is also the policy of the Beth Israel Hospital, New York, according to Louis J. Frank, superintendent, who says: "We regard the special nursing of patients as coming under the same category as transfusions and other therapeutic measures, the expenditure for which is considered properly applicable to maintenance.

"We have unhesitatingly and without limit assigned special nurses to free cases, whenever necessary, and this is done not only in the hospital but in the homes of the patients under our care. We have several cases being 'specialed' at the present time, all at the expense of the hospital."

Dr. R. G. Brodrick, Stanford University Hospitals, San Francisco, made the following statement in regard to Alameda County Hospital, San Leandro, Calif.:

"The hospital's Christmas committee, a group of interested citizens, established a special nursing fund of $500 during 1923. This group has since been included in agencies that are members of the community chest and derive funds from it.

"Whenever the doctor considers that a patient's condition requires special nursing, he takes the matter up with the superintendent of nurses, and she thereupon endeavors to provide the necessary service from the hospital's staff. If this is impossible she employs a special nurse, and upon discontinuance of the special services of this nurse, an invoice, with the name and address of the nurse, time employed, rate, and name of patient, is approved by her and forwarded to the treasurer of this fund, who issues a check in payment. The amount of money expended in this way varies from $600 to $800 per year."

Among the hospitals replying to this question of policy, a minority voiced the belief that, in their particular institutions, the need for such service was so small as to make unwarranted any definite policy. From the Barnes Hospital, St. Louis, for instance, Dr. Louis H. Burlingham, superintendent, assured us that while special nurses have been retained for ward patients, the expense of which was paid from the regular hospital funds, this work had been found necessary only on rare occasions.

"At one time ward patients who had undergone a particularly serious operation were 'specialed' by a pupil nurse, but this is not deemed necessary at the present time," writes Dr. Burlingham. He went on to point out, however, that in planning the work on the wards the patients who are particularly sick receive extra attention.

The practice of employing student nurses on special duty with ward patients obtains at the Milwaukee Hospital, Milwauke, Wis. The Rev. Herman L. Fritschel, superintendent, makes the following statement with respect to this service.

"Milwaukee Hospital invariably assigns special nurses to ward patients who need extra attention for any reason. These special duty nurses are usually chosen from the senior class. If relatives or others desire graduate or registered nurses for ward patients, such arrangements are made for them (at their own expense) by employing a private nurse from outside the hospital. We do not encourage this, however, unless there are special reasons for so doing."

Student Nurse Assigned to Case

The Minneapolis General Hospital, Minneapolis, has no means for supplying special graduate nurses for charity patients requiring special service. If special nursing service is needed by free patients the hospital places a student nurse on the case. This arrangement is considered a benefit both to the patient and to the student as well.

The necessity for providing a special nurse for occasional free or staff cases is recognized by the Grace Hospital, Detroit, from which institution Dr. W. L. Babcock, director, writes:

"Whenever a staff patient is in need of the services of a special nurse, the hospital provides one and pays the expense out of the endowment fund. In a few instances, friends of the family may be induced to provide the special nurse. However, the practice of affording special nursing to ward patients is frequently absolutely necessary, and has been carried out in this hospital for

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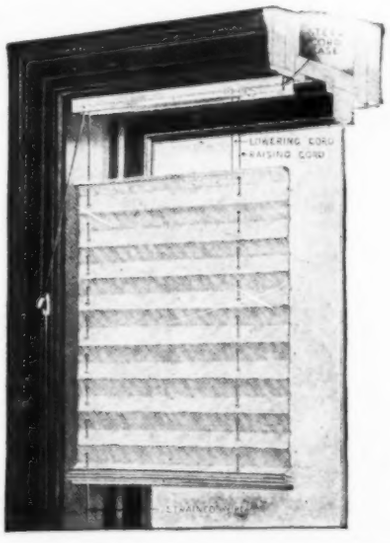

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some time. The money so expended is a part of the charity work of the institution."

From Dr. Herbert O. Collins, director of public welfare for the County of Fresno, Fresno, Calif., comes the following statement: "All patients in the General Hospital are public or part-pay patients, therefore it is seldom necessary to furnish a special nurse at the expense of the patient and no patient is allowed to have a special nurse unless the attending physician or superintendent of nurses thinks the nurse is needed.

"In such cases, if the relatives are able to meet the expense, they are asked to do so. In other cases, where either the doctor or superintendent of nurses feels that the condition of the patient demands special nursing, a special nurse is employed by the hospital at the prevailing rates, which in this locality would be $6 a day and board for ordinary cases and $7 per day and board for contagious disease cases."

"The practice of employing special nurses for general ward patients," says Dr. Willis G. Nealley, director, Brooklyn Hospital, Brooklyn, N. Y., "has long been adhered to at this hospital at the request of the attending physician or surgeon. We do, however, try to collect for the nurse's compensation from the friends of the family. I would estimate that one-quarter of the time of one special nurse is required for this work."

Dr. Christopher G. Parnall, medical director, Rochester General Hospital, Rochester, N. Y., suggests the danger of carrying the practice to the extreme: "To guard against the abuse of the privilege of furnishing special nursing care to free bed patients, it is required that the attending physician make a written request, which must be approved by the chief resident physician. Although it is seldom necessary to provide such special nurses, we do not hesitate to do so when the condition of the patient demands it. The cost, of course, is borne by the hospital."

Expense Charged to Patient's Account

From Dr. F. A. Washburn, director, Massachusetts General Hospital, Boston, comes the following statement: "It is the custom at this hospital to furnish special nurses to ward patients when the member of the staff in charge of the patient has convinced the director's office of the necessity therefor. An attempt is nearly always made to collect for this extra service from the one responsible for the patient's account, but the fact that a patient cannot pay does not prevent his having the services required. If the services of a special nurse are requested by a patient, when this attention is not absolutely necessary, payment in advance is required, if the privilege is granted."

Much the same policy obtains at Hartford Hospital, Hartford, Conn., Dr. L. A. Sexton, superintendent, writes: "Whenever our nursing staff is insufficient and we feel that the patient's chances for recovery are enhanced by the services of a special nurse, we then employ one for this purpose. This, however, is seldom the case at Hartford Hospital.

"Patients who are financially able to pay for the services of a special nurse, are required to take private or semi-private accommodations, leaving the public wards free for patients who cannot afford a more expensive accommodation."

Other institutions who make a practice of providing special nurses, when needed, regardless of the patient's ability to pay, are Fifth Avenue Hospital, New York, Johns Hopkins Hospital, Baltimore, Md., Cincinnati General Hospital, Cincinnati, and the Rhode Island Hospital, Providence.

So general is this practice as is shown in the replies received to our letter, and so much in the minority are those hospitals indicating the lack of need for special nursing service to indigent patients, that the natural conclusion is that the practice has become well established throughout the field and that in the hospitals where such nurses are not employed, conditions fail to warrant this policy.

BEAUTY QUEST AIDS HOSPITAL

The beauty parlor for the patients at Kankakee State Hospital, Kankakee, Ill., which was established nearly three years ago, has definitely proved its value, according to *Welfare Magazine*. This development serves to improve the physical condition of the patients and arouses in them an interest in their personal appearance. Quite frequently, also, a marked improvement occurs in their mental condition.

The equipment of the department now consists of four head washers, two large dryers which dry the hair in about six minutes; three small dryers; three manicuring tables with complete outfits; one barber chair; two massage chairs; one electric vibrator; one violet ray apparatus; one electric clipper; and a supply of corrugated scissors, combs, scalp brushes and marceling irons and a special water heater to prevent the sudden changes in the temperature of the water. The room is furnished with large mirrors, attractive furniture and hangings. With the exception of a permanent curler, there is all of the equipment that would be found in an up-to-date shop.

Every woman patient in the institution receives treatment once every two weeks. This is done with three employees and the help of seventeen patients. Each ward has a regular time for treatments and the patients are taken care of in relays of twenty to thirty, so that the operators are kept busy all the time during the day. Special treatments are given to patients on occasions of dances and entertainments. About eight hundred patients are treated weekly.

A regular system of checking this treatment has been established. Every other week on Saturday, each ward sends a list of all its patients to the office of the chief nurse. On the following Monday these lists are checked against the treatment record at the center and then returned to the chief nurse. If the list shows that any of the patients have not received treatment, the supervising nurse sees this patient, examines the hair for cleanliness, dandruff and appearance and makes a report in writing of her findings. The only reason for absence is physical illness or mental disturbance. Once a week an operator visits the wards of those patients reported absent and gives them special attention.

A card index system of records, giving the date and type of treatment, is kept for each patient. Report is made to the chief nurse daily and to the managing officer weekly.

In the beginning, the object was to improve the condition of the patients' hair and scalp, as well as their personal appearance. It was found that the patients became more contented, their general appearance improved, they improved physically, and the improvement in their mental condition far surpassed the most optimistic expectations.

The patients who formerly were in a stupid condition began to show an interest in themselves immediately following treatment. Many of them improved to such an extent that they were able to return home. Other patients, after treatment, developed an interest in the work and are now happy and contented as assistants in this department.

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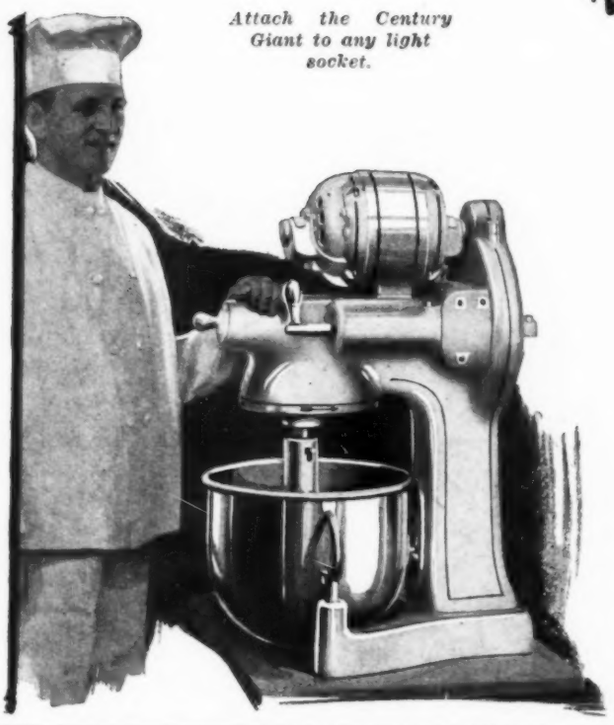

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NURSING AND THE HOSPITAL

Conducted by M. HELENA MC MILLAN, R. N.,
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IS THE OBSTETRICAL SUPERVISOR UNDERPAID?

By Nan H. Ewing, Principal, Nurses' Training School, Ravenswood Hospital, Chicago

IN WOMEN'S trade unions there is an unceasing battle cry—equal pay for equal work.

This phrase belongs to the industrial field and to the factory. It came into being as the result of the failure of men in industry to recognize women as competitors. It is easy to standardize salaries when equal work is produced. If the output is the same, the pay should be the same; but though this is evident and logical, there is a constant battle waged by the men's and the women's trade unions over equal pay for equal output of piece work.

No one has yet succeeded in measuring the output of hospital workers. There is no form for estimating the amount of work one individual does as compared with another. Likewise, the salaries fluctuate, and with a wide range of salaries and a still wider range of duties the individual with a flair for figures and standards is nonplussed.

Competent obstetrical supervisors are difficult to find and more difficult to retain and a study of conditions over a period of several years has been made. The prevailing difference in salaries of operating room supervisors and obstetrical supervisors as revealed by this study was noted, and a statistical study of salaries was begun six months ago.

One hundred and fifty questionnaires were sent to hospitals having maternity services. One hundred and three replies were received with definite information. Catholic hospitals where sisters were in charge could not file salary reports, and a few of the questionnaires had to be discarded because the institutions from whence they came were special hospitals or had non-segregated services.

The more or less unfair competition in the matter of salaries between the obstetrical nurse and the operating room nurse dates back to the first modern hospitals. The surgical department was the *raison d'etre* of hospitals in this country thirty or forty years ago. Obstetrical service is comparatively new in the hospital and the number of obstetrical patients in the hospitals of this country is increasing yearly. The obstetrical service can keep step with the surgical service if the hospital has the facilities or the desire for this type of work.

The operating room supervisor in the small hospital is usually the chief lieutenant of the superintendent of nurses. Her salary is higher than the salaries of the head nurses on the divisions or wards. She is a ranking officer. J. W. Meyer, manager, Aurora Hospital, Aurora, Ill., in a report of salaries of nurse executives presented to the Hospital Association of Illinois in 1924 noted the following: average salary for operating room supervisor, $128; for floor supervisors (which included head nurses on obstetrical services), $107; for general floor nurses, $110.

In a six months' period of tabulating salaries listed in advertisements for surgical supervisors, it was found that out of 147 advertisements where the salary was listed, the highest salary offered to operating room supervisors was $175 and the lowest was $110. Maintenance was included in all cases.

What Study Disclosed

The highest salary paid to an obstetrical supervisor, according to the replies received in the study under consideration, is $175 with complete maintenance. Four hospitals reported salaries of $160 and three, of $150. One salary of $135 was listed, and there were fourteen replies giving $125, with maintenance, as the salary paid. Seventy-seven institutions out of the 103 studied pay their obstetrical supervisors an average of $100 a month with maintenance. In thirty-seven open advertisements for general duty nurses from hospital and nursing magazines, taken at random, the highest salary offered to a general duty nurse was $110 and complete maintenance, the lowest $75, and the average $96.75. Considering Mr. Meyer's report which showed that in Illinois the general duty nurse received an average salary of $110, this average is low, but it serves to call attention to the salaries of obstetrical supervisors in seventy-seven hospitals where the supervisor receives slightly more than $3.25 per month above the salary of the average general duty nurse.

The following question was asked. "Is the status of the obstetrical supervisor identical with that of the operating room supervisor?" Twenty-five executives replied that the general status was the same, but only three out of 103 replies indicated that the salaries were identical. Several replied that the operating room supervisor was paid a higher salary because her responsibility was greater and she had charge of more cases, as well as because she was more thoroughly experienced than the obstetrical supervisor.

The directors of three large obstetrical hospitals considered the prevailing salaries for obstetrical nurses too low. One superintendent gave as her opinion that the low salaries were responsible for a more or less inferior type of work in obstetrical departments, and that the

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salary question had a good deal to do with the existing discrimination against specialization in obstetrical nursing.

Four executives replied that they considered postgraduate courses in obstetrics unnecessary and unprofitable. Several answers indicated a favorable attitude to postgraduate courses, and twenty institutions out of the 103 answering took the stand that special preparation was a necessary qualification for obstetrical supervisors.

The size of the hospital or department has little effect upon the salary paid. The maternity department of a university hospital having thirty-six beds, with twenty deliveries each month, has a supervisor receiving $125 per month plus maintenance, while another university hospital having a maternity of forty beds with sixty deliveries each month, pays its supervisor $100 plus maintenance. A similar irregularity predominates all through the returned questionnaires.

In fifty of the institutions reporting, the obstetrical supervisor teaches obstetrical nursing. Only one hospital reported that the supervisor taught obstetrical nursing principles to the interns.

Fifteen supervisors out of the 103 are on call at night.

Sixty questionnaires were sent to prominent gynecologists and obstetricians throughout the country. Thirty-seven were returned. Ten expressed ignorance of salaries in general. Four expressed opinions that the salaries are too low, and twenty-five consider it necessary to impress upon hospital executives the need of properly qualified supervisors in a department having three big subdepartments. Two recently returned answers stressed the importance of proper supervision, regardless of tradition in nurses' salaries, and cited the tragedy that lately occurred in Chicago as revealing a need for the best supervision obtainable.

Wide Variation in Salaries Noted

There seems to be a marked and long existent irregularity in the salaries of operating room supervisors, obstetrical supervisors and ward or pavilion supervisors. A prominent nursing executive recently said: "I think the hospitals have made a serious mistake in placing one nursing department above the other in salary. The management of a medical or surgical floor of sufficient size is as great a problem as the management of an operating room or maternity." Any floor supervisor who has managed a large pavilion of mixed cases, who has taught her students theoretrical and practical nursing simultaneously and who has striven to maintain a high degree of efficiency in service to patient and physician, knows that her task is prodigious and her pay small in comparison.

Thus the questions before us are: Is the obstetrical supervisor underpaid? Is her responsibility for the divisions of her service adequately rewarded? Should she be given only (as in most cases) $5 or $10 more per month in salary than the general duty nurse? Is she big enough for her job, and is her job big enough for her? Is her work less technical or less arduous than the work of the surgical supervisor?

These data have been compiled in the hope that the obstetrical supervisor may come into her own. Any study of departmental responsibilities and salaries plainly shows a torpid indifference to the obstetrical department in general, and a lack of appreciation of the potentialities of the supervisor's work and influence. The hospital may be apathetic or the supervisor may be lacking in ability; nevertheless, the individual supervisor has a rightful place in the important group of overseers of hospital service, and her position should be made worth while to her, as well as to the hospital.

MANY VALUABLE PAPERS PRESENTED AT SAN FRANCISCO NURSES' MEETING

The annual meeting of the National League of Nursing Education was held June 6-11 at the Clift Hotel, San Francisco, nurses representing schools of nursing of the entire country being present.

The president, Carrie M. Hall, Peter Bent Brigham Hospital, Boston, in her opening address reviewed in brief the work of the league and its growth from 500 members to 2,300 in the twelve years since its annual meeting was last held in the same city.

During the session reports of study of each of the following subjects were presented and fully discussed: The ratio of nurses to patients; group and hourly nursing; development of efficient central registries; the desirability and means of securing midwifery training for nurses.

The committee on education, at a conference presided over by Isabel M. Stewart, told of its comprehensive program. A part of this is to find out the actual duties to be performed and the qualifications and preparation needed by a superintendent of nurses and her assistants; by instructors, by supervisors and by head nurses.

A session of the instructors' section, led by Daisy D. Urch, president, California League of Nursing Education, reported studies of the means of securing maximum student participation in the learning process and the various types of examination.

Mary M. Roberts, editor, *American Journal of Nursing*, New York, took charge of an interesting discussion on teaching of ethics, which was so well attended that there could be no question of the importance of this subject.

Two crowded meetings were given over to reports from the Committee on the Grading of Nursing Schools. Dr. May Ayres Burgess' microscopic study of the country indicated the great desire of both doctor and nurse to give the patient good nursing care. It encouraged those who heard to believe that any undesirable feeling on the part of patient, doctor or nurse would be brushed away by a real understanding of actual conditions.

Mary C. Gladwin, Director of Nursing Education of Minnesota, made a most valuable contribution in her presentation of a study of the school of nursing connected with the small hospital which covered years of contact with these hospitals, in a number of different states.

The officers elected for the following years were:

President, Carrie M. Hall, first vice-president, Mary May Pickering, Berkeley, Calif., second vice-president, M. Helena McMillan, Chicago, secretary, Ada Belle McCleery, Evanston, Ill., treasurer, Marian Rottman, New York.

HOSPITAL WILL INSURE STAFF IN GROUP PLAN

A plan for group insurance of hospital employees in the City of Edmonton, Alberta, has been decided upon by the city hospital board, but the plan will not go into effect unless 75 per cent of the employees, who number 210, agree to participate in it.

It will rest with the insurance company having the contract to obtain the consent of the employees. Each policy is to be for $1000, while the total annual premium cost is placed at $1,751.31, of which the hospital would contribute $260.91 and the employees $1,490.40. The employees would pay 60 cents per month, or $7.20 per year. In case the group scheme goes into effect future employees would be required to participate in it, but this would not be applied until they were permanent.

But who charts the medicine?

YOU may judge the progress of a patient by the nurse's chart. But upon what do you place dependence in your selection of organotherapeutic supplies?

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and MARY A. FOLEY, Director of Dietetics, Kahler Hospital, Rochester, Minn.

HOW THE DIETARY DEPARTMENT OF ROCHESTER GENERAL HOSPITAL WAS ORGANIZED

By Effie May Winger, Chief Dietitian, Rochester General Hospital,
Rochester, N. Y.

THERAPEUTIC dietetics with the facilities of modern research has through the last decade focused its attention on diet in disease and preventive measures to maintain health.

In small hospitals or in private work where emphasis has been placed on demonstration, spectacular results have been accomplished. It is the office of the hospital, through cooperation with its staff, to offer facilities to bring this service to the general public, but it often fails to attain the goal because of lack of organization of the institution's large personnel. In the complication of the variety of departments, through lack of understanding of highly specialized people—physicians, nurses, dietitians and chef—through weariness of long hours, many a diet perfectly worked out under controlled conditions has, in a hospital, by the time it reached the patient, reacted upon his psychology so that it did not bring about the desired results. The medical director of the Rochester General Hospital, Rochester, N. Y., has felt the need of meeting this situation and is utilizing in the management what modern industry offers.

Learning From Industry

The world of industry with its countless numbers of people and vast sums of money has been likened to a big research laboratory, where many of the problems of the day have been and still are being solved. Not the least among these is that of more efficient organization. This has grown out of an analysis of each individual job by the motion study or stop watch method. Hospitals can find much in these methods that is useful for their organization. To this extent we have tried to standardize the work of our dietary department by outlining in detail the work to be done by each employee.

Careful study over a long period of time is required for the analysis of each job, but the result has many advantages. In the first place, it expedites the work. With a definite outline the employee knows exactly what he is expected to do and can go ahead and plan his work accordingly; secondly, the responsibility lies in one person. It cannot be shifted. If a certain task is well done only one person can claim the credit.

The element of fatigue is an important factor, and this we have considered. A tired person fails to turn out a perfect product; a tired person irritates her coworkers; a tired person is not a happy person, the buoyancy of spirit is one of the chief factors of success when a sick individual is to be treated. To anticipate this matter of fatigue a physical examination is required of every employee in order that any physical defect that would interfere with his success may be corrected before he enters service. Our whole organization works on the eight-hour schedule.

Cooperation Is All-Important

Standardized practices help to promote perfect organization, but equally important with this is cooperation between every member of the department. The dietitians, the chef and the kitchen force must work together, and there must be cooperation among all the employees. This is exemplified in our department during the noon hour when dinner is served to the entire nursing force and the patients within one hour. This necessitates quick and efficient work. During this time the waitress from the staff dining room helps in the nurses' cafeteria for the heaviest part of the hour, the diet kitchen maid helps in the dish room, one vegetable woman wipes shelves, another works in the employees' dining room. Without such cooperation how could we manage? Besides the task of washing dishes, the dishwasher scours and keeps clean the three aluminum stock-pots, the vegetable steamer and the cereal cookers.

Not only must this spirit prevail within the dietary department itself, but there must be cooperation among the department heads. At the Rochester General Hospital we are most grateful for the cooperation of the housekeeping department, from whom our part-time workers are borrowed. Also in time of emergency, and there are many such times in every hospital, this spirit of helpfulness is all that saves the day. The cooperation of the nursing department makes possible our short period of meal service.

The Rochester General Hospital has a capacity of 300 beds, including private and ward cases. The total number fed at each meal approximates six hundred. The food is sent in quantity from the main kitchen to thirteen floor kitchens. For the ward service heated food trucks are used. These are sent to the floors on elevators, rolled into

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No. 1 in series on Evolution of Man's Diet.
The THRIFT Gas Oven

And After Eighty Thousand Years of Progress

THE modern "Thrift" method of baking brings to the hospital and diet kitchen the advantages of obtaining baked foods with greater eye appeal and more uniform quality.

Civilization has added another important requirement of baking foods—that of fuel economy.

Thrift Gas Ovens bake at "held" or retained heat and consume less fuel than any other portable type oven on the market.

Careful insulation methods confine and consume every possible bit of heat. This means not only additional fuel economy but makes for greater comfort and efficiency, particularly when space is at a premium.

Thrift Oven construction features will improve your baking results and cut your costs. Investigate the particular advantages of the Thrift Gas Oven for hospital use. Send for Bulletin N.

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Sufferers of imaginary ailments; patients starving themselves on heavy, indigestible foods need only to be told what to eat to enjoy better health. For 35 years physicians have recognized the value of Shredded Wheat as an every day food. It contains all the real good of the whole wheat grain. (And nothing is finer for nourishing the human body than whole wheat.) Steam cooking, shredding and baking assures digestibility and purity. It may be prescribed with safety and satisfaction in treating many cases of malnutrition.

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This sturdy food can be eaten for any meal, every day. Two biscuits served with rich milk or cream and seasoned to suit the taste make a perfectly delicious, completely nourishing and satisfying meal. Made even more tasty by covering over with any fresh or stewed fruit. Reap the benefits of Shredded Wheat for yourself as well as your patients. Write for our booklet, "Ask the Doctor".

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the center of the ward and the food is served directly to the patient. By means of this mechanical equipment service is quickened, an important factor in a ward of thirty-five to forty-five patients. Again, the patients are better satisfied; they can see what is to be served to them and may request a larger portion of soup or a second serving of vegetable without causing the nurse to make an extra trip to the kitchen.

The food for the private patients is sent to kitchens on the floors by means of electric dumb-waiters and kept hot on steam tables. In the nurses' and employees' dining room cafeteria service is used. By this arrangement overhead of service is reduced and allowance is made for flexibility of the meal hour. The supervisors have a small service dining room off the main one. The same menu is served them that is given the nurses. The staff and interns have a separate dining room, also with waitress service. Their meals are served one hour later, with luncheon at noon and dinner at night. This makes it possible for the waitress to help in the cafeteria for a few minutes both at noon and at night during the busiest part of the hour.

First Assistant's Duties

The first assistant dietitian is responsible for all theoretical and practical teaching of the nurses. Our diet kitchen serves as a laboratory to provide for this training. We emphasize there the educational factor and do not overload the service by making salads and desserts for private patients. There the nurses learn to prepare baby formulas and to set up trays for all types of special diets. These diets are cooked, served and sent out from the diet kitchen, either by electric dumb-waiter or by truck. The nurse who has been responsible for their preparation accompanies the porter in delivering these trays. Any complaint on the part of the patient is cared for immediately. Teaching patients concerning their diets and relieving for the chief dietitian are also part of the first assistant's responsibilities.

The second assistant is directly in charge of the food service for patients. It is her duty to see that the food is sent to the floors on time, that it is in good condition and that the amount is sufficient. When the food trucks are returned to the kitchen she inspects them as to the amount of food returned. Each day she makes rounds on the floors to check the supplies on hand and from them is better able to judge the amount needed. In this way we try to control the waste caused by excess ordering of meals and supplies, such as bread, butter and fruit. She is also responsible for the amount of food left out for the night cook. She assists in keeping an inventory and also helps with the routine record work of the office. She is responsible for closing the department at night.

The third assistant in our department is not necessarily a graduate dietitian. A person who has specialized in institutional management has proved most satisfactory. She is directly in charge of the four dining rooms—employees', nurses', supervisors' and staff—the serving of the food, the cleanliness of the dining rooms, the replacing of broken equipment and the care of the linen. Once a week all broken dishes and glasses and silver unfit for use are exchanged for new, and once a month all worn linen is replaced.

The chef is in charge of all the kitchen employees. It has not always been easy to secure a person who is willing to assume this responsibility or who can carry it successfully. His interest must extend beyond food into an understanding of the management of the hospital. The demands upon a dietitian's time are numerous; she cannot and should not follow details. Making the chef responsible for the workers under him, and making the assistants responsible for the workers in their departments, leaves the dietitian free for more important matters.

The pastry cook is one of the few persons employed who works a straight eight-hour day of unbroken time. He makes all the desserts and pastry, ice cream and ices, for the whole hospital. We do not bake our own bread, hence all the work can be done by one man.

This plan of organization has been in operation in our hospital for three years. It was not theoretically worked out on paper and superimposed on the organization. We started with actual conditions and have modified, learned and are still learning by our failures as well as by our successes.

An element always to be considered in hospital service is an attempt to put the right person in the right place. We do not hestitate to change our personnel if we find the person does not fit into our organization. An example of this has been shown in changing chefs three times within two years. One chef refused to cooperate, his successor would not assume any responsibility outside his own cooking, a third refused to have a physical examination.

In common with all institutions, we try to keep our help as long as we can, teaching them while they are in our employ. There are a few places for advancement in the department and these are filled from our present employees. For example, our night cook started in our organization as a vegetable woman and showed such ability that when the night cook's position was open, with a little additional training, this woman was capable of filling it. Another element for consideration is reducing the turnover. We are attempting to meet this by starting employees with a minimum wage and increasing this after a certain period of preliminary work.

Another method used is the bonus system. At Christmas time each employee who has been in service one year is given a bonus check based on length of service and salary received.

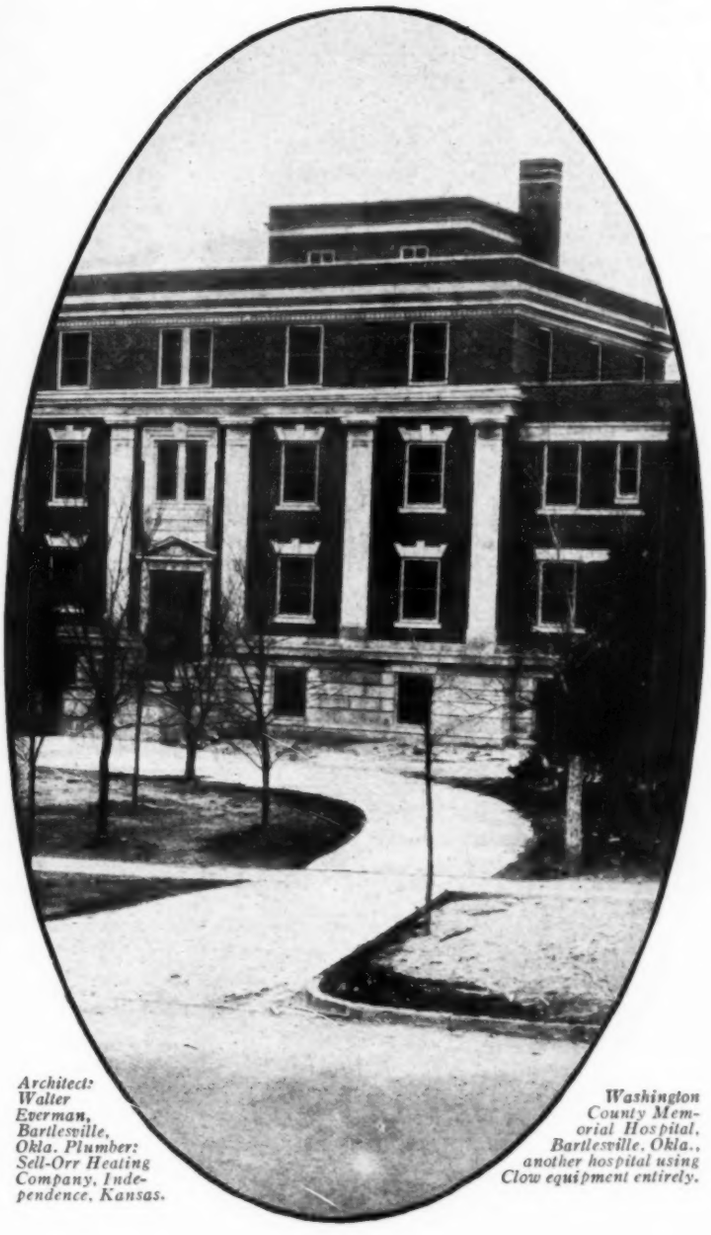
Organization is an ever evolving process and we realize that ours is no exception. The future may not see it complete, but results up to the present have been encouraging. The dietitians feel that their part in perfecting the organization can be brought about only by harmonious cooperation and by fully assuming the responsibility that is theirs, thereby commanding the respect of their coworkers.

AT WHAT AGE SHOULD THE NURSE START TRAINING?

During the last seven years there has been a remarkable change in the proportion of hospitals that admit pupil nurses as young as eighteen years of age.

Figures recently compiled by one of the leading advertising agencies show that 97.2 per cent of the hospitals, whose statistics are published by the American Nurses' Association, have as a minimum age limit for pupils eighteen and nineteen years. In 1918 only 70 per cent of the hospitals had the minimum age limit in these years.

These and similar figures, interesting to every superintendent of a nurses' training school, have been compiled in an effort to show training schools the prime necessity of using more vigorous means of directing the attention of the young women of the country to the opportunities presented in the nursing profession.



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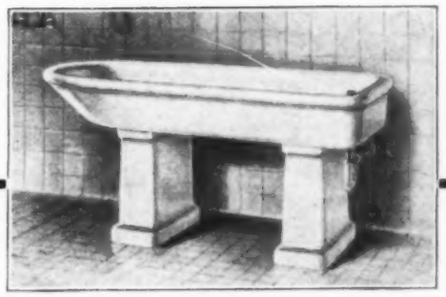
During that period, Clow has not only met the needs of the hospital field successfully—but has actually designed and built new fixtures and fittings especially for use in hydrotherapeutic treatments. The Washington County Memorial Hospital, of Bartlesville, Okla., is typical of the many Clow hospital installations.



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OUT-PATIENT SERVICE

Conducted by MICHAEL M. DAVIS, Ph.D., Executive Secretary, Committee on Dispensary Development, United Hospital Fund of New York, 151 Fifth Avenue, New York
A. K. HAYWOOD, M.D., Superintendent, Montreal General Hospital, Montreal, Que.

VERTICAL VERSUS HORIZONTAL

By Minott A. Osborn, General Director, United Hospital Fund of New York,
New York

IN THE days of Pat and Mike a certain vogue was enjoyed by the story of how they arranged the proof of which made his circuit first. Said Pat: "If I get there first, I'll make a chalk mark; if you get there first, you rub it out."

A more effective arrangement has latterly been set up between the modern hospital and the clinic as out-patient department, and it is of the contribution to the effecting of this better arrangement by the Committee on Dispensary Development of the United Hospital Fund of New York that I wish to write.

In the belief that the up-to-date hospital should attempt through its out-patient department to keep the patient vertical and thus save both him and the hospital from the more serious consequences of being a horizontal patient, the Committee on Dispensary Development was organized some six years ago under the auspices of the United Hospital Fund, with Michael M. Davis, Ph.D., as its executive secretary.

In 1917 the public health committee of the New York Academy of Medicine had initiated a comprehensive study of the problem of clinics in New York City. A grant of $10,000 from the Rockefeller Foundation made this survey possible. It dealt chiefly with the out-patient departments of hospitals, but it also covered the field sufficiently to indicate existing deficiencies due chiefly, as study proved, to lack of standards and inadequate financial support. This investigation served to demonstrate the importance of the clinic to public health, to private medical practice, to medical education and to charitable and welfare work.

A plan of action was then approved by the Rockefeller Foundation and by representatives of the Academy of Medicine, and in pursuance of this plan the Committee on Dispensary Development was organized under the auspices of the United Hospital Fund and with the support of the Rockefeller Foundation.

Scope and Aim of the Committee

The latitude and objectives of the committee, which was not set up as a permanent organization, were as follows: to study conditions and formulate standards; to make experiments in the field to demonstrate improvements in practice; to determine, before its expiration, what activities or improvements could be knit permanently into the structure of existing institutions and organizations, and what permanent agencies receiving general community support could be enlisted to carry on needed activities in behalf of clinics after the committee had ceased to exist.

The six-year program of the Committee on Dispensary Development has now been completed, and some of the results are indicated in a report entitled "Medical Care for a Million People."

One out of every five persons in New York City makes use of the clinics in the course of a year. The population of New York City has reached the uncomfortable total of six million people.

In New York City $5 a day, not counting the fee of physician or surgeon, is the usual cost of hospital care. For out-patient service, considered on the basis of a weekly visit and again excluding the remuneration to the physician, the usual cost is $5 a month.

From the above statements it is an easy conclusion that the chief hope of substantially reducing the economic burden of hospital service to the people or to the public is through preventing the necessity of resorting to the hospital by treating diseases in early and non-incapacitating stages. It was to the solution of this economic problem that the Committee on Dispensary Development addressed itself from the first.

From Medical Dole to Medical Practice

There was a time, within the memory of many living New Yorkers, when no one went to a hospital except those who were desperately ill and destitute, and even the destitute thought of the clinic only as a place where medicines might be secured free. The modern hospital has become a primary source of medical care for the bedfast sick of all classes, and has developed to this point within the past century out of a sort of poorhouse with a medical flavor. The clinics that now render curative and preventive service to a million persons annually in New York City have likewise evolved within a generation, from, practically, a medical "soup kitchen" in which patients stood before the doctor for perhaps three minutes, seldom more, in order to obtain a prescription for medicine.

At the present time the modern hospital has two branches of service: one for the patients who are sick in bed and the other for those who are up and about.

The advance of medical science and such adjuncts as the x-ray and the laboratory have vastly augmented the power of physicians to diagnose as well as to treat disease, and to deal with it in early stages.

Our Great Achievement—
THE EVER-CLEAR QUARTZ WINDOW

Our greatest contribution to the field of Physiotherapy is the New Ever-Clear Water-Cooled Lamp—an instrument whose delicate precision remains always constant. The film of organic or inorganic matter deposited upon the quartz windows of Water-Cooled Lamps after a few weeks of operation, has always robbed them of their efficiency and made it impossible to employ an exact dosage.

This great difficulty has been absolutely eliminated by Burdick engineers—in the New Ever-Clear Lamp. Now the cooling stream circulates around the quartz window instead of flowing across its face. Now the intensity of Ultraviolet radiation is pitched much higher—and remains constant through thousands of hours' service.

The ingenious construction which creates this great improvement is fully protected by patents and will be utilized only in products that carry the Burdick trademark. Burdick equipment, alone, offers you the perfectly controlled and permanently sustained intensity of radiation that earns your most complete confidence.

THE BURDICK CORPORATION, Milton, Wisconsin

The bactericidal properties of Ultraviolet light recommend this therapy to the specialist in a vast number of cases. Not only may the invading organisms be destroyed, but the hyperaemia induced has a uniformly tonic effect. (The illustration pictures the treatment for Hay Fever with the special quartz applicator in the New Ever-Clear Water-Cooled Lamp.)

Our new booklet, telling in detail the story of the New Ever-Clear Water-Cooled Lamp, and describing the many types in which it is offered, is just off the press. We will gladly mail you a copy, without charge.

The Burdick Corp.,
250 Madison Ave.,
Milton, Wis.

Gentlemen: Please mail me, without charge, your booklet on the Ever-Clear Water-Cooled Lamp.

Name .....

Street .....

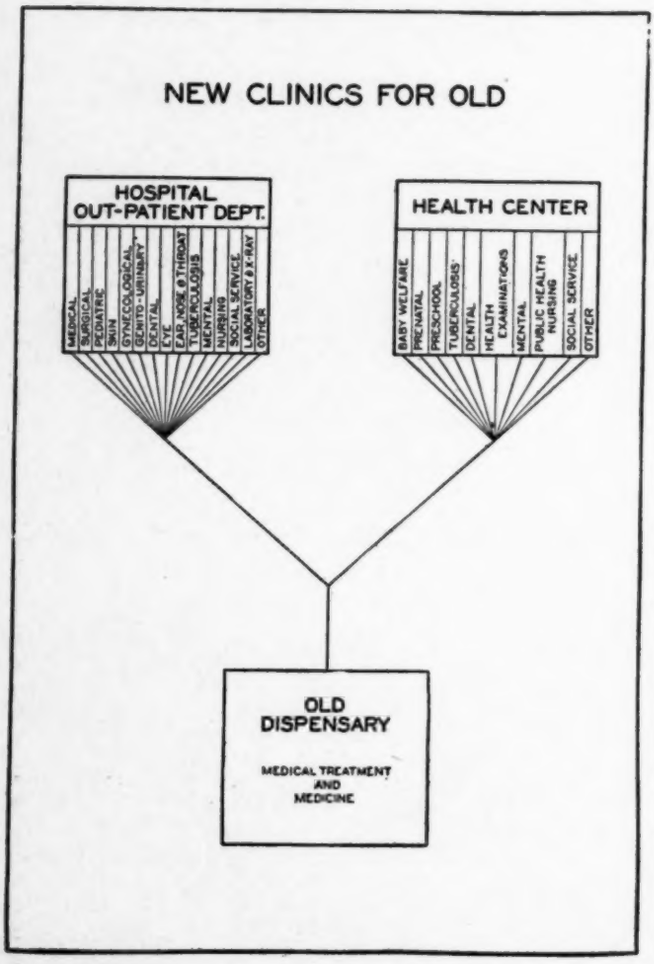
City and State.....

It is cheaper and better for both patient and community to deal with disease while the sufferer is able to be up and about, than when he is obliged to be in bed. With the increased facilities for diagnosis and treatment, it has become more easily possible to accomplish this, and thus the out-patient department of the hospital, as well as the private office of the doctor, has assumed a more important aspect, as compared with bedside care, than it had in former days.

In 1926 the fifty-six member hospitals of the United Hospital Fund cared for about 232,157 bed patients and for about 710,297 out-patients.

The Committee on Dispensary Development concerned itself with the interests of the vertical patient.

In New York City in 1926 there were some 335 clinics, excluding industrial clinics, ranging from small local serv-



ices with an average attendance of thirty patients a week, to great out-patient departments of hospitals receiving 600 or more patients a day. These clinics are maintained by some 172 different organizations, including four municipal departments and 168 private agencies, of which the chief types are hospitals, health associations, charitable agencies, settlements and churches. The out-patient departments of hospitals number about 95, the clinics unattached to hospitals about 241. In these clinics over 1700 different services in about thirty branches or specialties of preventive and curative medicine are provided.

The average number of persons attending clinics in New York City on the usual working day is nearly 20,000, makng a total of almost 6,000,000 visits to clinics in a year. The number of individuals served yearly is about one and one quarter million. The industrial clinics, which have not been studied and are therefore not included in the above figures, would increase these totals.

A review of the accomplishments of the Committee on Dispensary Development during the carrying out of its six-year program will indicate the scope and importance of this field of inquiry into the modern hospital and health field. The items follow:

Established on a sound and self-supporting basis a pay clinic under the auspices of Cornell University Medical College, New York; now receiving an average of 475 patients per day; providing expert service at cost in all branches of medicine and surgery; remunerating its medical staff; offering diagnostic facilities to physicians at large.

Developed an effective organization for the continued study and improvement of clinics in New York City, by supporting the Associated Out-Patient Clinics and arranging for the amalgamation of its work with closely related activities of the New York Tuberculosis and Health Association, and the establishment of the united organization as a permanent department of that body.

Cooperated with Presbyterian Hospital in improving its out-patient department, trying out and establishing standards of clinic management, and demonstrating also that the major part of the additional expenditure required could be met by increased income from patients without curtailing needed free service.

Studied the problems of the 240 clinics in New York City which are unattached to hospitals, through practical experiments with the Northern Dispensary, five health centers, several social settlements and field observations at other places, leading to many practical improvements and to

A Health Center program, advocating the grouping and coordination of the scattered unattached clinics doing preventive work into local health centers, each serving a definite area.

Developed the technique of preventive or "health" service in clinics through cooperative field work with local health stations, with the Kings County Medical Society and with other bodies.

Demonstrated a cooperative and economical method of furnishing medical examination to children sent for vacations or care in country homes; an undertaking that is now permanent and almost self-supporting.

Maintained an information and advisory service concerning clinic matters; displayed an annual exhibit of clinic work at the conventions of the American Hospital Association. (These are now continued by the New York Tuberculosis and Health Association).

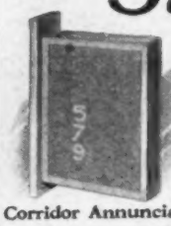
Further evidence of accomplishment is found in the monographs, reports and reprints based on material collected under the auspices of the Committee on Dispensary Development.

Progress in Six Years

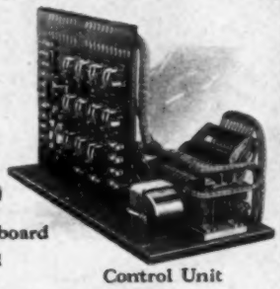
In the forty-six institutions reporting out-patient expenses to the United Hospital Fund, the expenditures for out-patient work were $1,598,372 in 1920, and $2,379,431 in 1925, an increase of 49 per cent. The amount of work done, as measured by the number of visits of these patients, increased only 23 per cent. The average expenditure per visit as reported increased from 64 cents to 90 cents. No single item is more indicative of general advance than is this figure.

Several important institutions have remodeled their medical organization so as to unify more completely the professional staffs of the in-patient and out-patient serv-

Holtzer-Cabot Signaling Systems Apparatus



Corridor Annunciator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Private Room Call and Reset Station

Ward Call and Reset Station

Commanding

Consideration for their simple construction — exclusive features, and dependable service, Holtzer-Cabot Signaling Systems are specified by leading architects and engineers. Each of the following systems

Nurse's Call
Doctor's Call
In and Out
Fire Alarm
Watchman's Clock
Telephone

are the very latest developments in labor and time saving signaling and protective systems.

A descriptive brochure will be sent on request

Flush Lamp Annunciator

Dome type Lamp Station

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Electro Mechanical Bell

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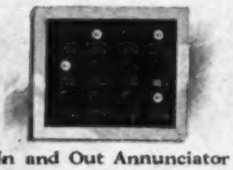
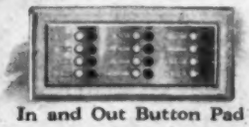

In and Out Annunciator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Ohio Nitrous Oxid cylinders are individually tested before shipment; Lennox Ethylene contains a degree of purity heretofore unknown; Gas Mixtures are carefully prepared and Lennox CO_2-Ether maintains its purity over long periods of time.

OHIO

NITROUS OXID ETHER CARBON DIOXID
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Please send without cost or obligation the following articles:

☐ Balanced Anesthesia, by J. S. Lundy, M.D.
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MH77

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ice. Centralized record systems now exist in thirty institutions, about double the number found six years ago. At least forty institutions have introduced into one or more departments an appointment system.

New or radically reconstructed out-patient buildings have been built or authorized in eight institutions that are members of the Associated Out-Patient Clinics. Laboratory and x-ray facilities have increasingly been made accessible for use with out-patients. Much of the increased expenditure mentioned has been devoted to securing salaried personnel to assist the physicians—nurses, social workers, clerks.

Perhaps most significant of all is the advance in the point of view of the physicians.

On the other hand, the report of the Committee on Dispensary Development is careful to point out that conditions are still far below what they should be. Examination of patients in many clinics continues to be hasty and superficial because of limited space and overburdened doctors. Antiquated record systems, in which the institution's record of the patient's condition is split into as many comparatively inaccessible parts as there are specialties that have treated the patient, are still maintained because of inertia, lack of appreciation of accepted standards or fear of expense. Money and effort are wasted because treatment is started on patients without a systematic attempt being made to carry it through to completion.

Responsibility for these conditions in the privately supported institutions rests ultimately upon their boards of trustees, but must be shared by those members of the senior medical boards of the hospitals whose interests are limited solely to bed patients.

The Committee's Recommendations

In presenting its report the Committee on Dispensary Development has made the following practical recommendations:

1. Pay clinics for persons of moderate means with adequate remuneration to the physicians: more clinics to meet the needs of the middle-economic groups of the community for good medical service without charity, and at a cost within their means.
2. Improvement in standards of service through continued work by the Associated Out-Patient Clinics Committee of the New York Tuberculosis and Health Association and by the United Hospital Fund.
3. Extension of preventive service in clinics.
4. Promotion of health centers, advancing the coordination of unattached clinics into district health centers, and discouraging isolated clinics maintained by nonmedical agencies except for an intramural or special clientele.
5. Adequate city appropriations for municipal clinics, particularly for those of Bellevue Hospital, New York.
6. More clinic service in certain districts, especially in the Borough of Queens, in some districts of Brooklyn, and in Manhattan on the west side below Seventy-second Street, after the expected removal of certain clinics now in that area.
7. More clinics in certain specialties, particularly dentistry, prenatal work and mental hygiene.
8. Coordination of clinics and social agencies, removing the unsatisfactory relations and waste of money that now exist.
9. Revision of the state dispensary law.
10. Continued research into clinic problems, such as the efficiency of medical service in clinics, home service to the sick poor with special relation to chronic cases, and the functions of industry in maintaining clinics.

In 1923 the Committee on Dispensary Development issued through the Associated Out-Patient Clinics of New York, which it supported, a statement of clinic standards. This statement received the approval and endorsement of 100 leading physicians and also of the public health committee of the New York Academy of Medicine and of the Medical Society of the County of Kings.

In addition to the obvious need of suitably designed and equipped quarters for the out-patient the following standards were presented:

1. The out-patient and the bed services should be regarded as intimately associated phases of hospital work and should be unified as fully as possible as to medical staff and as to administrative organization.
2. The number of patients accepted for care should be limited and regulated according to the facilities of staff, space and equipment.
3. Adequate records should be maintained of the medical work, the attendance, and the income and expenditure. All the medical records of a patient should be filed together.
4. Adequate laboratory service should be made available for the out-patient department.
5. Nursing service, social service and clerical service should be provided. Physicians should be able to devote their time to their patients and be freed from mechanical and clerical duties.

It is of interest to know that three years later, in 1926, these standards were incorporated in the national standards for out-patient work adopted by the American Hospital Association.

Such has been the accomplishment of a committee which, under the auspices of the United Hospital Fund of New York, undertook a work of far-reaching importance.

HIGH SCHOOL PUPILS DESIGN DECORATIONS FOR BABIES' HOSPITAL

A recent contest for designs for decorations for the new Babies' Hospital at the Columbia-Presbyterian Medical Center, New York, has brought in more than ten thousand designs submitted by junior high school pupils from ten to fourteen years of age. The idea for the contest originated with Etta Crowley, a teacher in one of the New York public schools, situated near the Medical Center, who gave her class as a problem the production of a design for a stained glass window at the Medical Center—a window that "would make sick children forget that they were sick."

FIRST INTERNATIONAL SOCIAL WORK CONFERENCE ASSURED IN PARIS

The first international conference of social work in history will be held in Paris, France, July 9 to 13, 1928. Announcement of this arrangement was made at the recent national conference of social work, held at Des Moines, Iowa, May 11 to 18, and was received with enthusiasm. For this international session five sections have been organized, covering various aspects of social work. It is expected that this conference will have a lasting effect on the development of social work and the establishment of improved relations throughout the world.

A Necessary Requirement Of the Modern Hospital

Hospitals are large business institutions and must be run on a business basis to be successful.

The Hospital secures its reputation from the service it renders. If its equipment is of the very latest, its service is correspondingly efficient.

Those who later may need the services of a Hospital are forming their opinions probably long before they go to a Hospital.

These opinions are favorable or unfavorable in proportion to the reputation of the Hospitals in the community.

Schoedinger's Visible Clinical System of Chart Filing, has increased the efficiency of every Hospital in which it has been placed and thereby put it on a firmer business basis.

This System is so divided into units that any Hospital may make a beginning in its installation, no matter how modest.

Write today for prices

Visible Clinical Record Chart Desk C.A.6

32 in. high, 37 in. wide, 19½ in. deep

To Hold Thirty Special Noiseless Aluminum Book Form Chart Holders

Rack size 29⅞ in. wide over all; 10 in. deep

F. O. SCHOEDINGER *Manufacturer* **Columbus, Ohio**

Cheerful Colorings in Hospital Furnishings

It is now being recognized that colorful and harmonious environment has a beneficial effect upon patients, and that white and drab surfaces are not necessary to sanitation. By the use of washable fabrics and surfaces hospital rooms may now enjoy the cheerful and restful color schemes of a refined home.

Our Contract Division and Interior Decoration Studios, which have had a vast experience in furnishing and decorating residences, hotels, clubs, theatres, and churches, are giving special attention to the artistic possibilities of hospital furnishings.

Recent installations in this field are bringing forth enthusiastic comment. The use of specially woven sunfast and tubfast damask for chair covers, curtains, bed spreads, etc., with walls tinted to match, provides the necessary color to give the rooms a new feeling of cheerfulness.

Correspondence is invited from hospital authorities.

CONTRACT DIVISION

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HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by C. W. MUNGER, M.D., Director, Grasslands Hospital, Valhalla, N. Y.

GETTING THE MOST OUT OF THE REFRIGERATING PLANT

By C. T. Baker, Consulting Engineer,
Atlanta, Ga.

IN THE modern hospital as in other institutions mechanical refrigeration and man-made ice have materially increased the facilities for service in many directions and it is probable that refrigeration will play an increasingly important part in the future.

In far too many hospitals the refrigerating plant is in an inaccessible place which makes it difficult for the engineers and attendants to care for the equipment properly, with the result that often little atention is given to it and it is allowed to deteriorate.

One of the principal requisites of the hospital ice making or refrigerating plant is cleanliness and sanitation, and along with the routine of plant operation goes the necessity for rigid adherence to good housekeeping methods by those charged with the plant upkeep.

In hospitals where the refrigerating plant includes an ice making system for producing ice in sufficient quantities to supply the institution's requirements, it not infrequently happens that the ice freezing tank and surroundings are found upon examination to be unsanitary. A concrete example will illustrate this. In a certain plant of this kind the analysis of the water in the ice cans showed a high bacteria count and colon bacilli were also present. Investigation disclosed that the trouble was caused by filth and dirt being deposited on the freezing tank top from the shoes of certain of the employees who used the tank room as a short cut to reach other parts of the building. This practice was stopped, the tank room and tank top thoroughly cleaned and two additional windows were provided in one wall to give more light and sunshine. The water troubles then disappeared.

Freezing Does Not Kill Bacteria

In some quarters the idea prevails that the freezing process destroys all bacteria, but this is not by any means true. Many bacteria are killed, to be sure, but they are mostly of a harmless variety, while the bacteria responsible for typhoid and intestinal troubles are, in the majority of instances, not killed but simply rendered temporarily inert.

To insure that the ice supply will be safe and free from contamination it goes without saying that the water supply must be fully protected by sanitary measures, from its source to the time it is frozen and placed in the refrigerated storage or holding room.

Judging from the manner in which many of the storage rooms and small refrigerators are neglected, it appears that these facilities are supposed to be foolproof or to possess the inherent ability of automatic cleaning, as well as being permanently immune from contamination. This is far from the truth. The only method that can keep these refrigerators sanitary is well directed and frequent attention on the part of those in charge of such equipment.

Clean Refrigerators Frequently

All refrigerators should be cleaned often enough to insure sanitation, and foodstuffs, such as vegetables, should not be carried for any great length of time at temperatures not low enough to prevent decay. Any vegetables showing unmistakable signs of decay should be promptly removed and discarded. One head of cabbage, for example, in the early stages of decay will produce objectionable odors in the refrigerator which might easily be absorbed by other food products, particularly by all kinds of dairy products.

Wherever possible dairy products, such as milk, cream and cheese, should be stored in a refrigerator separate from other food products, and insofar as is possible, correct temperatures should be maintained in all refrigerators. The temperature to be maintained depends, of course, upon the character of the product carried in the various refrigerators.

Most hospital refrigerating and ice plants are electrically driven, that is, the ice machine, brine pump and water pump, are operated by electric motors, and usually current for the operating of such machinery is purchased from the local power company. Consequently, it always pays to maintain the machinery in good condition, otherwise power costs will be unnecessarily high.

One of the contributing causes of high power cost is neglect properly to insulate the cold pipe lines, that is, piping systems through which low temperature ammonia and brine are circulated. Where such piping systems are not properly insulated, heat is taken up from the surrounding air to such an extent that much of the refrigerating capacity of the plant is dissipated in doing unnecessary work. In addition the net capacity of the plant is reduced, which requires the machinery to be run a greater number of hours a day in order that it may properly handle the work for which it was installed. This in turn

PEQUOT
REG. IN U.S. PAT. OFF.
SHEETS
AND
PILLOW CASES

for exquisite feel

JUST TOUCH THE SMOOTH, LUXURIOUS texture of a Pequot sheet! How gratefully soothing it is—an invitation to relax and slip into restful sleep!

Imagine the clean, smooth expanse of such sheets on *your* beds. In the exquisite weave of these Pequots, your guests will sense a refinement of the comfort which distinguishes your whole institution.

Pequot "feel" is an ultimate attainment of painstaking manufacture. From the selection of the long, strong cotton fibre itself, to the exacting inspection of the finished sheets and pillow cases, each process must contribute to the uniformly fine, even, long-wearing luxury of a Pequot.

Careful buyers usually end by *standardizing* on Pequots, because they are so uniformly luxurious and economical.

Made by the Naumkeag Steam Cotton Company, Salem, Mass. Parker, Wilder & Co., New York and Boston, Selling Agents.

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means added increase in the consumption of electricity.

Pipe covering, while costing money to install, will pay large dividends in saving operating expense, and if properly installed and maintained it will last indefinitely.

Another source of high power cost in the refrigerating plant is the loss that is caused by the ammonia compressor being compelled to operate against excessive or abnormal condensing pressures.

If the hospital has available sufficient cooling water to be used over the ammonia condensers for the purpose of liquifying the superheated ammonia gases, it is easy to predetermine within very close limits what the discharge pressure should be for the conditions under which the plant is being operated. Ordinarily, these pressures will vary from, say, 150 to 185 pounds. However, the lower the pressure the less power will be required to operate the machine, and it always pays for the engineer to clean the condensers often enough to insure that they will be free from foreign matter or scale deposited by the cooling water. He should also purge the ammonia system as often as may be required in order that the non-condensable gases, which are one of the principal contributing causes of high condensing pressures, may be removed.

At the present time it is possible to purchase automatic non-condensable gas separators, which will continuously and automatically remove from the ammonia system air and other non-condensable gases that cannot be condensed and which, if allowed to remain in the system will take a heavy toll in power consumption. Such automatic devices usually pay for themselves in the saving of power and increase in capacity in about two years' time.

Another contributing cause of high power cost in the refrigerating plant results from carelessness in the installation of the brine and water piping systems. Too often incorrect pipe sizes are used which result in excessive friction. Then again, one often finds a multiplicity of right angle elbows and sharp bends, which also increase the friction of the water or brine flowing through the system. This in turn means that more power is required to circulate a given amount of water or a given amount of brine in a stated time. A little common sense and care exercised in laying out such piping systems will pay handsome dividends in the saving of power later on.

Free Ammonia System From Oil

Still another source of loss in capacity and high power bills is the presence of oil in the ammonia system, particularly in what is known as the low pressure or evaporating side of the plant. Oil that finds its way into the coils of the brine tank, or into any part of the system for that matter, retards evaporation because of its insulating qualities. Consequently it is more difficult to maintain proper temperatures, and the machinery has to be run a greater number of hours to get the refrigerating effect that would be obtained in a lesser number of hours were the system entirely free from oil. The operators should, of course, watch this point closely and drain the oil out at regular intervals, say once a week or more often if necessary.

In some refrigerating plants it is necessary to use one or more belts as a means of transmitting power from the motor to the machines. Often one finds the operator using rosin, white powders and other nostrums on the belts, to prevent slippage. The use of these, while affording temporary relief to a slipping belt, will, in the end, result in complete ruination of the belt if the practice is continued over a long period.

If the belt slips there is some good reason for it: either the belt is overloaded, the pulleys out of alignment or pulley sizes incorrectly proportioned; or perhaps the belt speed may be too high or too low for the particular application. In any event steps should be taken to correct the trouble, instead of resorting to first-aid methods or tightening the belt, as is sometimes done, because either method not only ultimately destroys the belt but adds materially to the power required to drive it.

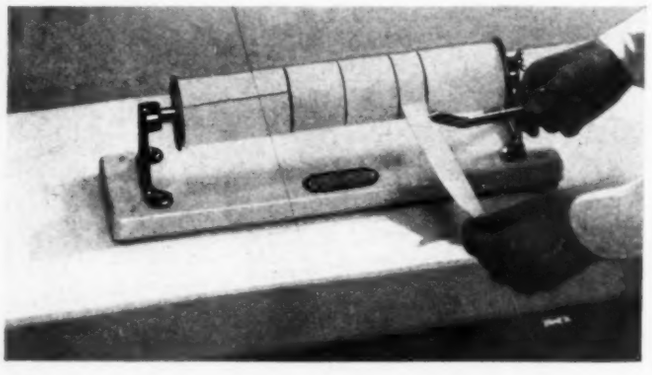
It is often thought that because a refrigerating plant is small and the total capacity of motors installed does not exceed, say, fifteen to thirty horsepower, the power consumption when compared with other developments may not be of great moment. However, it must be remembered that every kilowatt hour consumed will cost the management anywhere from one and a half to two and a half cents, and it is easy to see that unless the highest possible efficiency is maintained the current consumption will be out of all proportion to the work performed. This, in turn, will be reflected in abnormally high power costs.

All hospitals that are operating a refrigerating plant or drinking water plant in connection with the institution, should make a careful survey of it, and see whether or not there is anything that might be done to improve the efficiency of the plant.

SPOOL FOR ADHESIVE PLASTER

A new device for facilitating the use of adhesive plaster is now on the market. It consists of a revolving spool mounted on a strip of wood that may be mounted on a table or wall of hospital dressing rooms, out-patient clinics or first-aid rooms.

The spool is wound with ten yards of plaster cut in four, three, two and one-inch widths, so that when a small



width is needed the nurse or surgeon need only snip with the scissors the size desired and with one tear the revolving spool facilitates the tear to the required length. The section of the piece that is not used is then rewound in place on the spool through its revolutions. The spool rack is furnished gratis to hospitals desiring it.

IMPROVED URETHRAL SYRINGE

A syringe for the treatment of the female urethra and bladder has just been placed upon the market and should prove useful to those doing gynecological and urologic work. It has a capacity of about 30 cc. of fluid and a curved conical tip reaching the bladder and eccentrically placed so as not to interfere with a vaginal speculum, if used. Slight pressure prevents the return of the liquid. This syringe is always in working order. It has a non-filling bulb and is easily cleaned and sterilized. The syringe was designed by Dr. F. A. Van Buren, San Antonio, Texas.

Note: Men and women are affected by their surroundings. Their minds are likely to be especially susceptible to impressions received in a hospital. Unpleasant mental reactions—often having a harmful effect on the physical recovery of a patient—can be overcome to a large extent by the physical appearance of hospital interiors in general—by the color treatment of walls and ceilings in particular. This article, with others to follow, discusses color and its probable influence on the minds of the various groups of individuals in the hospital.

Where visitors enter with their *hopes* and *fears*..

COLOR

THE hospital reception room is a portrait gallery of the emotions. On the faces of visitors one sees depicted surging hope, depressing fear, hidden tears. Fear stamps the face of a mother. Hope flashes across the countenance of a father.

These people need help—for their own peace of mind and for the good of the patients they visit. Help can be given them by creating a pleasant, cheerful atmosphere in the reception room with the proper colors.

Leading hospital superintendents have proved this fact, that the right colors on walls and ceilings tend to produce a positive, beneficial influence on the minds of those who see them. They found that different colors tended to produce different effects—that the use of tints and shades of those colors intensified or subdued those effects. Then they learned they could obtain the exact tint or shade they desired with paint made of Dutch Boy white-lead and Dutch Boy flatting oil—a paint that is durable, washable, economical in every way.

Warmth plus brightness

The first point for you to decide in selecting the colors for reception room walls and ceilings is, "What effect should we desire to produce on the visitor?" One that will be stimulating, cheering, encouraging, of course. Sunshine is nature's most cheerful color. It radiates warmth and encouragement. So nothing is more natural than that yellow, the sunshine color, should be selected usually as a basis for the wall decoration.

Next, "What tint or shade of yellow should be used?" That depends on the reception room itself, its location, the amount of natural illumination it receives, its size and relation to other rooms and corridors. This selection is often wisely left to specialists in color treatments for hospital interiors.

In the Department of Decoration of National Lead Company are men who have made a special study of hospital decoration and the therapeutic value attributed to colors. They are working today with hospital administration boards, superintendents and architects, preparing paint specifications, painting formulas and color samples.

They have recommended color treatments for reception rooms and other parts of the hospital for institutions in nearly every state of the Union.

What one hospital uses

One color treatment recommended by the specialists of the Department of Decoration for the reception room and actually used by a hospital is the following:

For the ceiling—A light yellow just off white, made by adding French ochre to Dutch Boy white-lead.

For side walls—A buff, made by mixing chrome yellow, Venetian red and lamp-black medium with Dutch Boy white-lead.

For the trim—A light yellow, darker than the ceiling tint, the result of mixing medium chrome yellow and French ochre with Dutch Boy white-lead.

Although this has been used, it would be most unwise to assume that your reception room should receive the same treatment. Conditions vary in every hospital and separate recommendations should be made for each. One room may necessitate the use of a lighter tint; another may demand a darker treatment. No matter what tint or shade you require, you can always obtain it easily by adding the proper tinting material to Dutch Boy white-lead paint.

If you have any questions regarding the use or selection of colors in the decoration of any part of your hospital, write our Department of Decoration in care of our nearest branch office. Our color specialists will gladly work with you as they have done with hospital superintendents all over the country.

NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 800 Albany St.; Buffalo, 116 Oak Street; Chicago, 900 W. 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 W. Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Pa., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street

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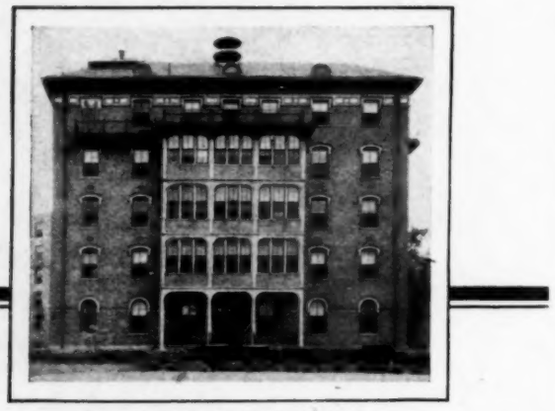
Permanently Efficient - CHAMBERLIN Weather Strips



Pittsburgh Hospital, Pittsburgh, Pa. The part of this hospital illustrated above was weather stripped by Chamberlin over twenty years ago—the equipment is still giving satisfactory service.

AGAIN and again the test of time proves the permanent efficiency of Chamberlin Weather Strips. This equipment installed in the older section of the Pittsburgh Hospital twenty years ago, continues to give as good service as when first installed—barring out dangerous draughts, deadening street noises, preventing the circulation of dust through the building and effecting marked fuel savings. For your hospital you can also depend upon Chamberlin to give you the same permanently reliable service. Chamberlin Weather Strips are correctly designed and carefully made, sold only through Chamberlin factory branches and installed exclusively by trained Chamberlin mechanics. And to give you the ultimate assurance of lasting satisfaction, Chamberlin guarantees and services its equipment "for the life of your building".

Write for Chamberlin Literature

CHAMBERLIN WEATHER STRIPS
"SINCE 1893-THE STANDARD"

CHAMBERLIN METAL WEATHER STRIP COMPANY
West Lafayette Blvd., Detroit, Michigan
Over 100 Sales and Service Branches throughout the United States
FC-206

A BEDSIDE TABLE THAT HAS MANY ADVANTAGES

By Harry H. Warfield, Superintendent, Carson C. Peck Memorial Hospital
Brooklyn, N. Y.

There are many shapes and styles of bedside tables and each one has some special feature. Several styles have an attachment for holding a tray over the bed, which is undoubtedly a great convenience if the mechanical parts always work properly.

I believe every device in a hospital that is to be used by any and everyone should be durable and simple in construction. With this and other important needs in mind I recently designed the bedside table here illustrated.

In most hospitals, especially in the Spring and Fall months, there is usually need during the night for an extra blanket. This of course is always provided for in a private room equipped with closets and dressers, but it is almost impossible to provide a special blanket for each semi-private or ward patient, I mean a blanket that is kept for the individual patient. The result is that a blanket is used for a certain patient, put away in a closet and when needed the next time used for another patient; or it is sent to the laundry each time it is used. Any hospital superintendent will agree that the wear caused by a blanket passing through the laundry or being cleaned by some other method is much greater than the wear by actual use on the bed. The main special feature of this new bedside table is to provide for an extra blanket.

As is shown in the illustration, the raised compartment at the back extends to the lower level, is ventilated, and has a bar across the top over which hangs the folded blanket. The top, as can be noted, has a hinged cover. A patient upon admission is given a new or freshly

cleaned blanket, which is usually sufficient, the regular bed blankets of course being changed when necessary.

Another important feature is the narrow vertical com-

FOR STERILITY

Lukens' Sterile Catgut

"Sutures with a Reputation"

C. De WITT LUKENS COMPANY

4908 Laclede Avenue · Saint Louis, Missouri, U. S. A.

For complete index of advertisements refer to the Classified Directory

Vita Glass gives important results with rachitic children

THE Cripples' Home, Bangor, Ireland, glazed the walls and roof of a sunparlor, 22 square feet, with Vita glass. As a result, 90% of the rachitic children who were unable to walk when admitted to the home are walking today.

Vita glass transmits ultra violet irradiation to the extreme limit of the sun's spectrum, including the vital rays. It may be had in two forms, clear and translucent (cathedral). The transmission qualities of both are attested by authorities such as Prof. Webb of Columbia University, Dr. Brian O'Brien of Perrysburg, and the Bureau of Standards at Washington.

Vita glass, introduced in the United States six months after two-year proving in England, has already been ordered or installed for scores of hospitals and sanatoria in this country. Also for homes, schools, factories, etc.

The cost of Vita glass is remarkably low in relation to its health value. Let us give you detailed information, including medical opinion and an account of results of Vita glass in actual use. VITA-GLASS CORPORATION, 50 East 42nd Street, New York, N. Y.

partment on the side of the table opening to the front, in which is placed the serving table when not in use. The serving or tray table has collapsible legs with a slightly raised edge all the way round. It will not have to be placed on the floor against the wall, where it is apt to

slip down and is in the way when the floor is being cleaned.

The top of the bedside table is made of monel metal and can be lifted off when it is necessary to clean the table inside. The raised compartment for the blanket prevents pitchers, glasses or vases being pushed off and broken.

The lower compartments are of ample size, one providing for the basin, pus basin, soap dish and mouth wash cup, the other for a bath robe and slippers. There is a towel bar on the inside of the door and another across the back.

The entire construction is of steel, with the exception of the monel metal top and nickel hinges, which could be made of steel or some other material in order to reduce the cost, if necessary.

HANDY SUTURE BOOK

An excellent method of handling sutures during an operation has been evolved at Misericordia Hospital, Philadelphia. The suture set is made up into a book about twelve and a half inches long and ten and a half inches wide, and has six pages, graduated in length, with the name of the suture contained beneath written on the lower flap. The designations, such as ligature, silk and linen, skin and others are plainly written.

By the use of this book no time is lost during an operation in looking for sutures or ligatures, as the book is prepared in advance of each operation. The possibility of handing to the surgeon a suture other than the one he has requested is also reduced to a great extent.

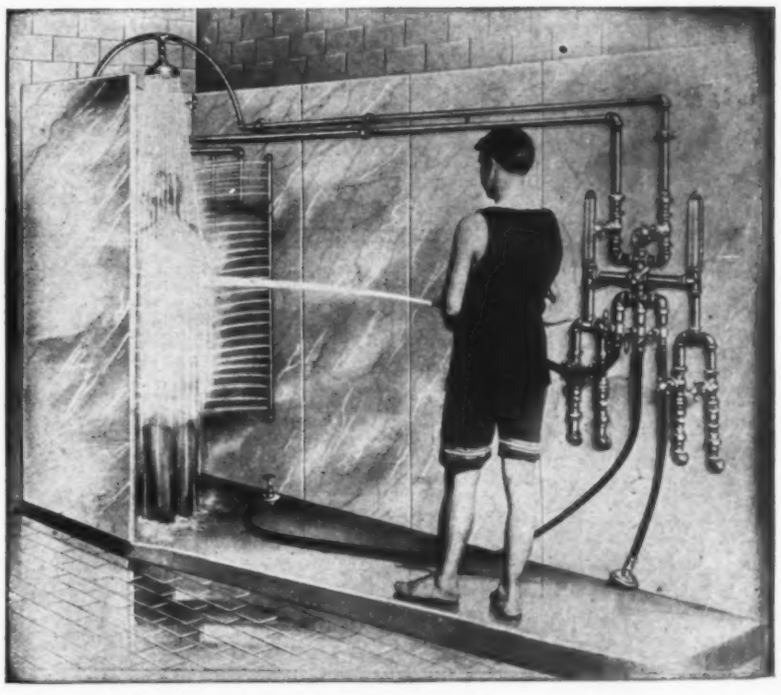
EFFICIENCY *and* ECONOMY

WITH BATTLE CREEK HYDROTHERAPY EQUIPMENT

"There is no remedial agent so flexible or so perfectly adapted to the treatment of disease as is water"

No hospital superintendent or physician is a stranger to the vast good embodied in Hydrotherapy. It ranks with "Light" as a pioneer in Medicine. It is one of the original 'specifics' and has stood the test of time.

The Battle Creek Hydrotherapy Apparatus still retains the position it created years ago. It is the oldest, simplest, most efficient, and most accessible type available. With this apparatus there are no expensive installations, no unhandy and inaccessible valves, and no buried piping necessitating the tearing up of a wall or floor to repair.



The G-3 Hydrotherapy Apparatus is complete, fitted to give the overhead and needle showers, rain, perineal, jet, revulsive, Scotch, and any other form of douche. All metal parts are made of heavy brass Nickel-plated. The pipes are made of the finest brass and are the one inch iron pipe size. The temperature regulating valves and the needle and overhead shower control valves are the standard compression type. The quick-change valve, located in the center of the control section, is made of babbit metal and will wear indefinitely. The hose used with the nozzel, perineal and rain douche is the best rubber procurable.

OTHER RECOGNIZED BATTLE CREEK APPLIANCES

Electric Light Bath Cabinets
Three models, varying in size and cost. Each cabinet complete with special comfort chair and necessary bulbs. Made of the finest hard wood water-proof cemented veneer. All models shipped ready to install.

Oscillo-Manipulator
An ingenious apparatus which gives massage better than the hand and with which every part of the body may be treated. Built to stand the strain or hard, daily institutional service. No attendant needed.

Vibratory Chair
A thoroughly practical means of applying vibration to all parts of the body. Highly beneficial in chronic cases where physical exercise is denied. A popular health aid for institutions and physician's offices.

The Radiantor
A portable electric light bath in compact form. May be applied while patient is in reclining or sitting position. Especially adapted to the needs of ward hospitals and small institutions where conservation of space is a factor.

Sinusoidal and Galvanic Apparatus
A complete and efficient appliance for producting positive muscular reactions. Frequency can be varied from 10 to 200 impulses per minute. Attractive in appearance; compact, and durable. Unexcelled in the quick relief of pain.

Solar Arc Lamp
Enables bed-ridden cases to benefit by the therapeutic value of sunlight at any time. The Solar Arc produces a larger proportion of actinic rays than is present in sunshine. No danger of tissue burns as in the use of X-ray and similar lights.

Electric Thermophore
The most efficient means devised for local or general applications of heat. Manufactured in pad and blanket forms. Special features make the Battle Creek Thermaphore superior to all others.

The Photophore
A small two-light reflector-type lamp for the convenient application of radiant light. Temperature controlled by thermostat. Indispensable in the care of the sick.

Dumbell Vibrator
A powerful vibrator that is built to stand hard service. Enables the operator to apply deep vibrations to any part of the body in three different forms—percutient, lateral or centrifugal.

Send now for catalogue of Bulletins

PHYSICAL THERAPY EQUIPMENT CO.

Sales Agents for SANITARIUM AND HOSPITAL EQUIPMENT COMPANY

Box M. H. **Battle Creek, Michigan**

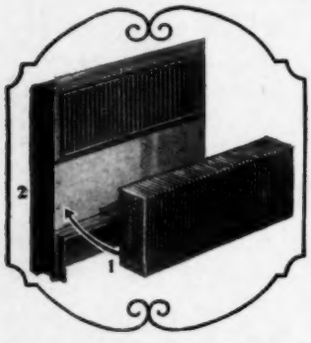
"The Home of Physical Therapy"

For complete index of advertisements refer to the Classified Directory

Incubator room—Woman's Hospital—Cleveland, Ohio, showing how extra space was utilized by installing the Herman Nelson Invisible Radiator.

No space wasting radiators here—

for the Herman Nelson Invisible Radiator is built right into the wall itself, making every inch of floor and wall space usable. An extra bed in most wards—free passage in narrow corridors—more practical arrangement of furniture and equipment—are points worth considering from the standpoint of efficiency and convenience alone.



Radiator (1) comes installed in a steel case (2) more substantial than the wall itself. The complete unit is ready to install in any 4-inch wall or partition.

Because it is leak-proof and rust-proof, without a single soldered or welded joint, the Herman Nelson Radiator is indestructible in service. Because it provides all the convenience of radiator heat without the inconvenience of the exposed radiator, it is the most practical equipment for the modern hospital. Mail the coupon for complete information.

THE HERMAN NELSON CORPORATION, MOLINE, ILL.
Builders of Successful Heating and Ventilating Equipment for 20 years

FREE *This interesting book of fusion The Herman Nelson Invisible Radiator.*

THE HERMAN NELSON CORPORATION
Moline, Illinois

Please send me your illustrated book No. 40 with complete information on the Invisible Radiator for hospital and home installation.

Name .....

Address .....

.....

Sales and Service

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WASHINGTON, D.C. CHARLOTTE, N.C. GRAND RAPIDS SAGINAW DETROIT CLEVELAND COLUMBUS CINCINNATI TOLEDO
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SAN FRANCISCO EMPORIA KANSAS CITY DENVER SALT LAKE CITY SPOKANE PORTLAND SEATTLE VANCOUVER TORONTO
WINNIPEG, MAN.

HERMAN NELSON *Invisible* RADIATOR

TRADE MARK

With the Wedge Core

INDESTRUCTIBLE

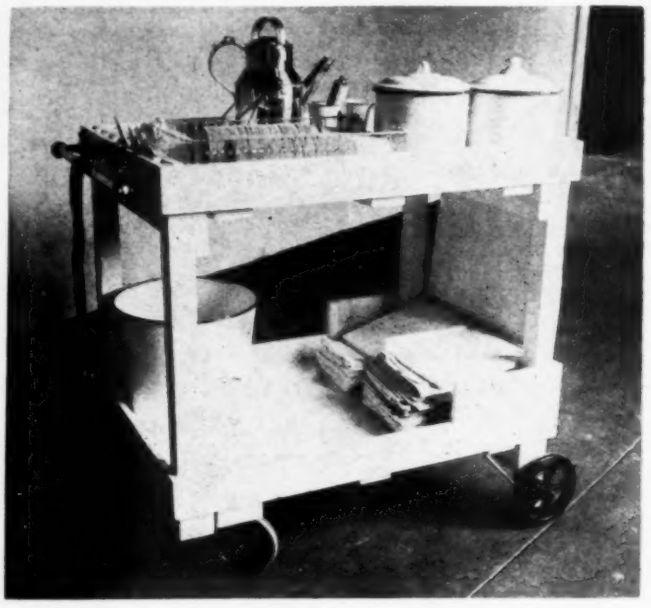
TRADE MARK

A CART THAT PROMOTES SANITARY BARBER SERVICE

By C. W. Munger, M.D., Director, Grasslands Hospital, Valhalla, N. Y.

Most hospitals have some sort of barber service and practically all of the larger ones have one or more barbers on their payrolls. The nursing department at Grasslands Hospital, Valhalla, N. Y., has developed a "barber cart" which assists in giving a sanitary barber service.

The upper tray of the cart contains the following:



white enamel covered container for sterilized shaving brushes; white enamel covered container for soiled shaving brushes; wire basket with supply of paper cups; metal holder with handle for paper cups; white enamel cup for holding shaving cream tube; aluminum or white enamel water container; oblong, white enamel covered basin containing disinfectant solution for razors.

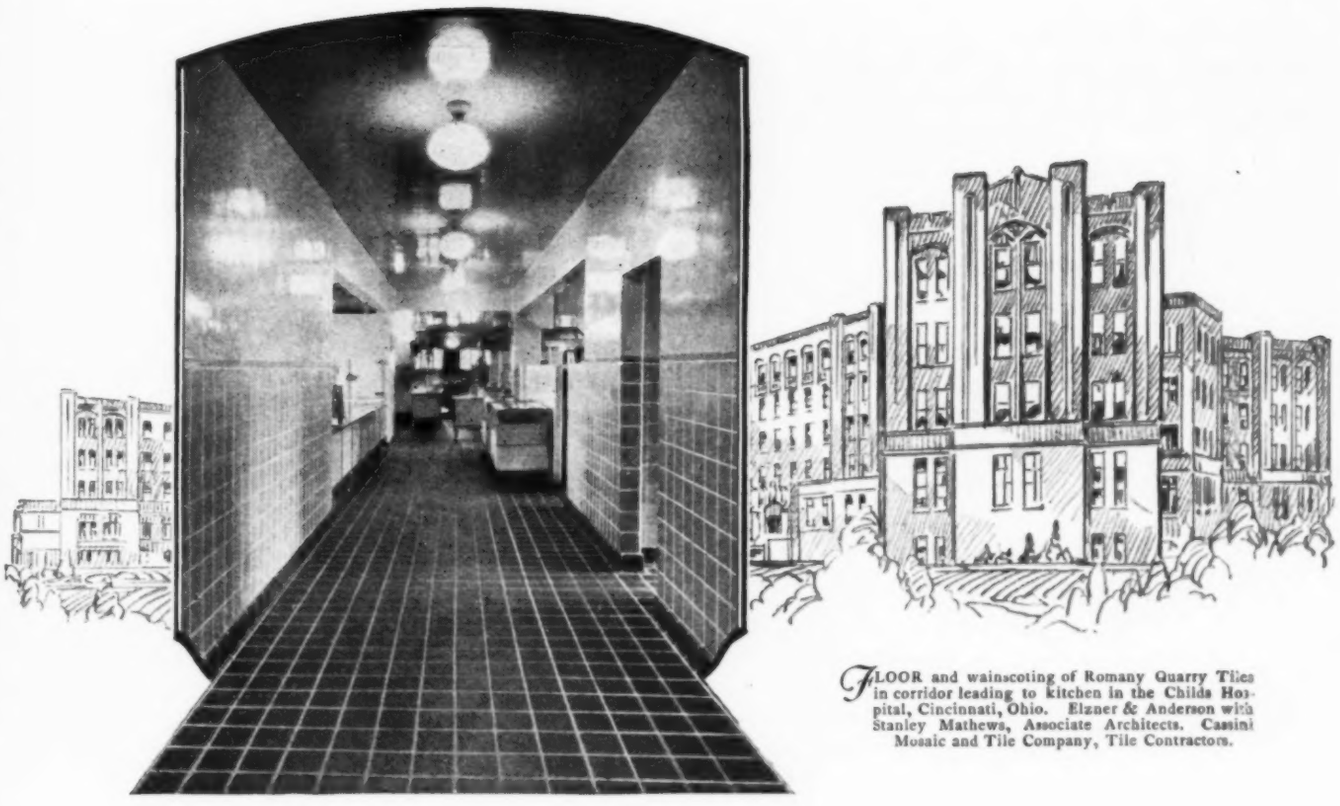
On the lower tray are one white enamel waste container; one supply of towels and one supply of tissue paper.

To one end of the cart is attached the razor strop and to the other end is a semicircular hoop, to which a bag for soiled linen is attached. The cart is made of wood and white enamel and has ball-bearing wheels. Almost any dressing cart could be easily converted for similar use.

It will also be noted from the picture that there are pigeonholes at one end of the cart for holding extra razors. The cart is equipped with two detachable brush handles and several dozen brush tips.

When shaving of one patient is complete, the soiled brush tip is unscrewed and a fresh tip put on.

The following is an outline of the rules for the barber and for those who care for the cart: Barber will take cart from gauze room each morning when ready to start work on the wards; before starting to shave patients, the water can is to be filled with hot water, and replenished as often as necessary; clean brush, fresh paper cup and towel are to be used for each patient; all stropping of razor is to be done before shaving is commenced; no soiled razor may touch the strop; after razor has been used on one patient, it must be washed in disinfectant solution and carefully dried with clean towel before being used again; in hair cutting, the scissors and



FLOOR and wainscoting of Romany Quarry Tiles in corridor leading to kitchen in the Childs Hospital, Cincinnati, Ohio. Elzner & Anderson with Stanley Mathews, Associate Architects. Cassini Mosaic and Tile Company, Tile Contractors.

Warm Bright Colors Contain Life Giving Qualities of the Sun

THE days when cleanliness alone was demanded of hospital floors and walls are past. These surfaces can be clean and pleasing at the same time. Mild tints of the warm colors, red, yellow and grey, are aids in the mental and physical recovery from sickness. They have a cheery and stimulating effect.

Romany Quarry Tiles are made in three plain colors—Romany Reds, Romany Greys, Romany Browns; and in a medley of golden shades that range from dark russets through tans to pale greens, the Romany Rainbow Tiles.

Where durability, permanence of appearance and low cost are important considerations, Romany Quarry Tiles stand alone as desirable floor and wall surfacing materials.

Member Associated Tile Manufacturers

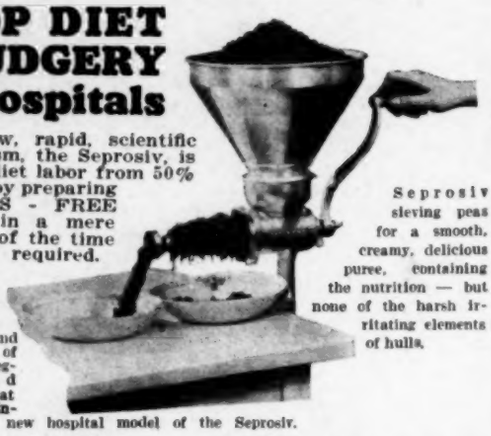
UNITED STATES QUARRY TILE COMPANY
PARKERSBURG, WEST VIRGINIA

ROMANY QUARRY TILES

For complete index of advertisements refer to the Classified Directory

STOP DIET DRUDGERY in Hospitals

That new, rapid, scientific mechanism, the Seprosiv, is cutting diet labor from 50% to 80% by preparing FIBROUS - FREE FOODS in a mere fraction of the time formerly required.



Seprosiv sieving peas for a smooth, creamy, delicious puree, containing the nutrition — but none of the harsh irritating elements of hulls.

Diet kitchens can and should eliminate tiresome hand sieving of fruits and vegetables and tedious meat scraping by installing the new hospital model of the Seprosiv.

No other kitchen mechanism can so rapidly prepare diets for patients suffering from chronic and sub-acute appendicitis, gastric ulcers, and all other ailments requiring food without roughage or seeds.

All the Nutrition—No Fibre—No Skins—No Seeds—Big Volume Output

The Seprosiv removes seeds, skins, cores, strings and fibres from fruits and vegetables, leaving the palatable and nutritious juice and pulp. It prepares almost instantly meat (cooked or raw), absolutely free from tough shreds, gristle and other non-digestible elements, retaining the rich juices and food substances. The large capacity, high speed and easy operation of the Seprosiv adapt it perfectly to the most severe hospital use.

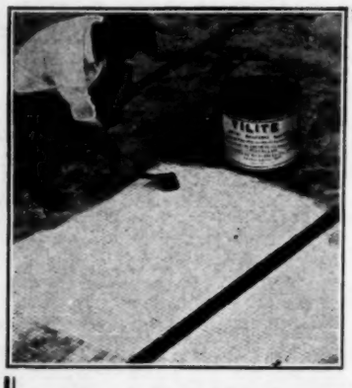
The SEPROSIV Separates and Sieves—1000 Uses in the Diet Kitchen

The Seprosiv sieves, grates, strains, scrapes, rices, pulverizes, mixes and compounds at lightning speed—figs, dates, carrots, prunes, peas, beans, potatoes, cranberries, strawberries, apples, corn, nuts, raspberries, blackberries, currants, tomatoes, celery, plums, apricots, beef, lamb and other meats.

Write for Complete Prescription and Prices

Let us show you how the Seprosiv will pay for itself in less than a month by reducing time and labor of diet preparation. Letter or postal brings facts.

AMERICAN UTENSIL CO.
156 N. Union Ave. Chicago, Ill.



A clean-up man had just cleaned his tile

when he was asked to try TILITE on the tiled surfaces he had already "cleaned." To his pleased surprise, TILITE removed about as much discoloration and close-sticking dirt as the first cleaning had.

"TILITE hereafter for me," was his verdict.

TILITE goes far beyond any other preparation on the market for tiled surfaces. Just wet the tile, sprinkle TILITE on lightly, and rub with a damp cloth or brush. It makes happy janitors and cleaners.

Send for a free sample and try it

Sterling Products Company, Easton, Pa.

TILITE

Sterling Products Co., Easton, Pa.
Send sample of TILITE for a free demonstration.

Name .....

Address .....

M.H.—7-1-27

metal comb are to be disinfected in the same manner as the razor; soiled brushes are to be put in the container provided: cups and tissue paper in waste pail; towels in soiled linen bag; barber is to cleanse his hands frequently.

Before the cart is returned to the gauze room the hot water container must be emptied and dried; soiled brushes must be thoroughly cleaned in running water and put back into the container for soiled brushes; waste pail must be emptied and cleaned; soiled towels should be left in the linen bag; the cart should be returned to the gauze room each day not later than 5 p. m.

When this cart is returned to the gauze room by the barber, the contents are to be checked. If any article is missing, the nursing office should be notified. Used brushes and container are to be exchanged for clean container and an equal number of sterilized brushes. Used brushes and container must be sterilized in autoclave before being used again. Soiled towels should be removed from linen bag and sent to laundry. Hot water can with cover off should be turned upside down, above radiator, and returned to cart next morning. The razor box is to be thoroughly cleansed and a fresh solution of 2 per cent lysol put in it. The cart should be supplied with a sufficient number of clean cups, towels, tissue paper squares, and shaving cream when necessary. Dull razors should be sent to the supply room on Monday mornings for exchange.

INSULATION SAVES DOLLARS AS WELL AS HEAT

Because metal piping quickly assumes the temperature of the fluid or vapor it conveys it must be apparent that when pipes are bare there is an immense amount of heat radiated to the surrounding atmosphere. While this is not always a total loss, since such heat is frequently welcomed in the rooms, corridors or passages through which the pipes pass, there is sustained by the hospital field an annual loss from this single source running into tens of thousands of dollars.

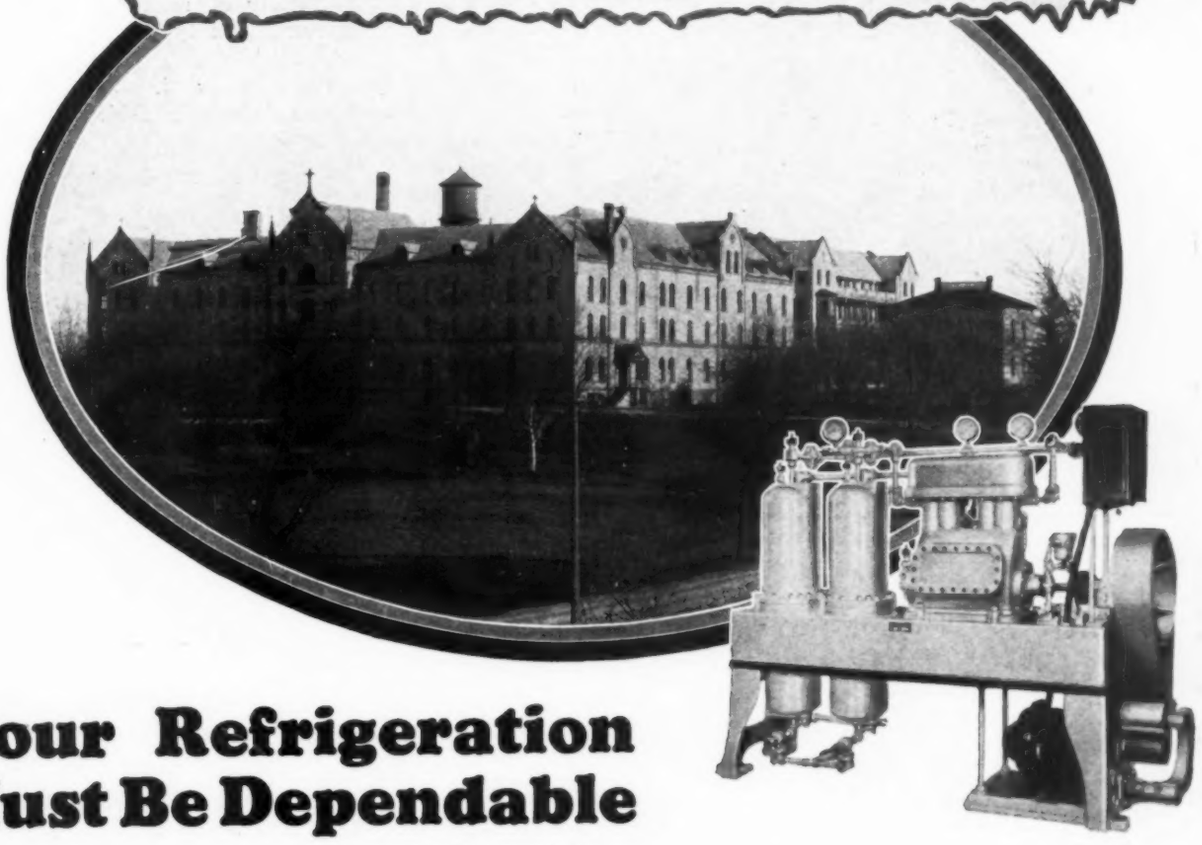
Covering all conductor pipes with some good insulating material will usually earn its cost within the first season. Power plant engineers have recognized this fact for many years, with the result that high pressure steam pipes are almost always covered. In many hospitals, however, uncovered pipes are much in evidence.

The amount of heat lost through bare iron pipes is enormous and is rarely appreciated by hospital superintendents. It varies from 53 cents per 100 lineal feet of three-quarter inch pipe at 120 degrees F., to $76.50 per 100 lineal feet of eighteen-inch pipe at 350 degrees F. To indicate the need for proper insulation let us consider, as an instance, a one and one-half inch-pipe carrying steam at 220 degrees through a room that has been heated to 70 degrees. The heat loss per lineal foot per hour of such a bare pipe is 197 heat units. If this pipe were to be wrapped with a one-inch layer of any of the better grades of insulators the heat loss would be reduced to 53.7 units, thus effecting a saving per hour per lineal foot of 143.3 heat units. Assuming that the useful heat generated costs 60 cents per million heat units, this per lineal foot saving in six months would be $0.377, while the cost of the covering would be about $0.165 per lineal foot.

There are three general types of commercial insulation available to hospital superintendents that may be successfully used to insulate low and medium pressure

Lipman

AUTOMATIC REFRIGERATION



Your Refrigeration Must Be Dependable

Nowhere is it more necessary to have absolutely dependable refrigeration than in a hospital. Foods must keep perfectly, biological cabinets must have exactly the right degree of cold to preserve serums, anti-toxins, and vaccines, and a plentiful supply of properly cooled drinking water is necessary. Ice, too, must be of unquestionable purity and available in large amounts.

Lipman Refrigeration measures up to all these requirements. In addition it has the important advantage of saving money, for Lipman machines cost less to run than it does to buy ice.

We have some interesting literature for every hospital manager. May we send it to you? Without obligation, of course.

Model 420 Lipman, one of several models adapted to hospital service. Full-automatic, silent operation — thermostat controlled; needs no attention other than an occasional oiling. Designed and built to occupy little space. Return the coupon below for complete description.

GENERAL REFRIGERATION COMPANY

117-193 Shirland Ave. Beloit, Wis., U.S.A.

Please send me full particulars including Free Descriptive literature on Lipman Refrigerating Machines.

Name..... St.....

City..... State.....

THE DRY, CONSTANT COLD OF THE MOUNTAIN TOP

GR CO

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IODIPIN 40%

IODIZED VEGETABLE OILS MERCK

Contrast Medium

Myelography—Pyelography
Bronchography

2 Cc. ampuls
Bottles of 25 Gm.

Literature on request

MERCK & CO.

64 Park Place New York

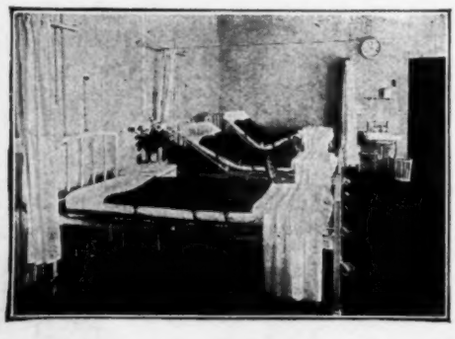
PROOF OF CLAIM

...regarding the NORINKLE RUBBER SHEETS, would say that I have been using these sheets ever since they have been on the market and in three different hospitals. I have always found them to be exactly as represented and would recommend them most gladly to any hospital.

Henry G. Yearick, Gen. Supt.
PITTSBURGH HOMEOPATHIC HOSPITAL
Pittsburgh, Penn.

Write for Samples and Catalog

HENRY L. KAUFMANN & CO.
301 Congress Street Boston, Mass.



steam lines. The corrugated type consists of alternate layers of plain and corrugated asbestos paper that has been wound around a mandrel and firmly bound together. Then there is the molded variety, wherein 85 per cent magnesia is molded from a mix with 15 per cent asbestos. The third type is known as laminated, and consists of layers of asbestos paper firmly bound together, each successive layer being separated by means of small indentations or tiny quantities of spongy material. Where needed, any one of these accepted types of insulating material will more than justify its cost.

For all ordinary purposes in and about the hospital, with its boiler room, laundry, and large kitchen, the type of insulation known as "85 per cent magnesia," available from a number of reliable manufacturers, is perhaps the most economical type to use. This insulation is made up in thicknesses known as standard and double standard, and in particular cases by actual dimension, such as one and one-half-inch, three-inch, and so on. For the selection of this type of insulation the following table is presented, since it gives compactly and simply, the required data:

Proper Thickness for 85 Per Cent Magnesia Under Varying Conditions

	Temperatures				
	100°-265°	266°-338°	339°-388°	389°-600°	601°-up
Pipes under 2-inch	Standard	Standard	Standard	Standard	Double standard
2 to 4-in..	Standard	Standard	Standard	D-Standard	3-inch
Over 4-inch	Standard	1½-inch	D-Standard	3-inch	3½-inch

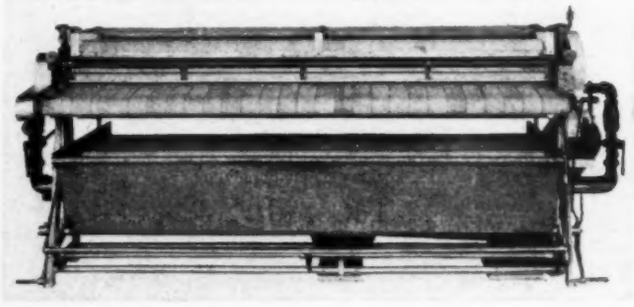
The standard thickness of such insulation material increases in accordance with the increasing pipe size and is:

Pipe size, inches	½ to 1½	2 to 3½	4 to 6	7 to 10	12 and larger
Thickness of insulating material	⅞"	1-1/32"	1⅛"	1¼"	1½"

Double standard insulation is of course merely two standard-thick layers.

A GAS HEATED IRONER FOR HOSPITAL LAUNDRIES

The accompanying illustration shows a gas heated ironer that is adapted for hospital laundries. This machine is available in various sizes with rolls 60 to 100 inches long. The capacity for the large size is claimed by the manufacturers to be approximately 1000 pounds



daily. With this machine single thickness flat work may be taken direct from the extractor, dried and ironed in one operation.

The machine is provided with six rolls, consisting of one heated and five compression rolls. All the rolls revolve.

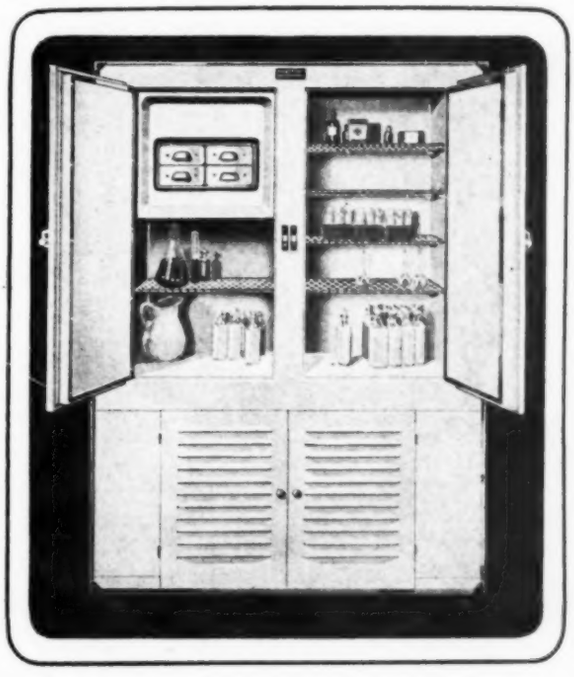
This ironer is now available with automatic finger guard and also automatic ribbon feed attachment, as shown in the illustration. These features insure safe operation and facilitate the working of the machine.

Positive Refrigeration for every hospital need

Frigidaire maintains correct temperatures without ice and without attention

THE correct temperature for preserving highly perishable serums, drugs, and vaccines without loss; the correct temperature for protecting laboratory specimens against deterioration; the correct temperature for keeping perishable foods fresh and wholesome until used—Frigidaire automatically provides all of them.

Day and night, year after year, Frigidaire maintains any desired temperature without ice and without attention. Its temperature control is stable, sensitive, positive—requiring no care or thought. And as Frigidaire uses only electric current, it makes possible the cleanliness and sanitation so necessary to the modern hospital.



Any hospital, large or small, can have the advantages of Frigidaire at low cost. Frigidaire mechanical units can easily be installed in present refrigerating equipment. There are complete metal cabinet Frigidaires that meet the needs of wards, laboratories and diet kitchens. There are five self-contained Frigidaire Water Coolers. And there is a Frigidaire Ice Maker that freezes practically twenty-two pounds of ice cubes at one time.

Write today for complete information about Frigidaire for the hospital.

FRIGIDAIRE CORPORATION
Subsidiary of General Motors Corporation
Dept. N-38, DAYTON, OHIO

FRIGIDAIRE

PRODUCT OF GENERAL MOTORS

For complete index of advertisements refer to the Classified Directory

DE PUY

Leader for Over Twenty-five Years in the Manufacture of Fracture Appliances

THE De Puy Manufacturing Company for over a quarter of a century has served the hospitals of the country with the best to be obtained in fracture appliances. Today, a consistently developed prestige brings to De Puy the distinction of being the largest exclusive manufacturer in this field. Let such integrity be of assistance to you in bettering the service of your institution as well as in reflecting significant economies.

Write for the De Puy Catalog. Let it guide you in the selection of every fracture appliance and need.

De Puy Manufacturing Co.
Warsaw, Indiana

QUESTION: Why is Regal Rub the choice of the majority of Hospitals in our territory?

ANSWER: Because Regal Rub is 100% satisfying. It not only possesses the highest alcoholic content permitted under Federal Laws, but the remaining 30% is made up of highest grade materials, each one valuable for its soothing and tonic properties.

Please refer to page 21 of our 128 page catalog No. 14, mailed you a few weeks ago.

UNITED CHEMICAL COMPANY
401 Delaware Street Kansas City, Missouri

REGAL RUB ALCOHOL

Book Reviews and Current Hospital Literature

THE NEW MEDICAL FOLLIES

By MORRIS FISHBEIN, M.D.[1]

A little more than a year ago Dr. Fishbein gave to the world "The Medical Follies," a volume that was amusing, entertaining, instructive and generally one of the most delightful books that has been placed upon the market in many moons. It is now in its seventh or eighth edition and deservedly so. It was but natural that an author who had accomplished so fine a book should essay another, probably spurred on by his publishers and possibly by his well wishers.

Now appears "The New Medical Follies" in which the editor of the *Journal of the American Medical Association* lays bare to the laymen a collection of articles on a variety of subjects and, whereas the first Follies was truly a work of art, the second attempt is woefully lacking in all of the qualities that made the first a valuable addition to every library.

Of the eleven chapters, three are worth reading yet none of these are as good as the poorest in the first. Those chapters dealing with the beauty cults, the craze for reduction and the follies of rejuvenation are good; an encyclopedia of cults and quackeries, and the end of eclecticism are dull; physical and electric therapy, and psychoanalysis are mere words, while those chapters dealing with bread and some dietary fads, and ethics are extremely weak—always remembering that these chapters were written for laymen rather than for professional consumption.

Twenty-five pages are devoted to psychoanalysis and nine to ethics whereas it would seem that the reverse would be logical. The chapter on bread and some dietary fads proved to be a downright disappointment, and its style is distinctly not that of Dr. Fishbein at his best. A minor annoyance is the repetition of the words "apotheosis" and "aphorism" which occur innumerable times throughout the book.

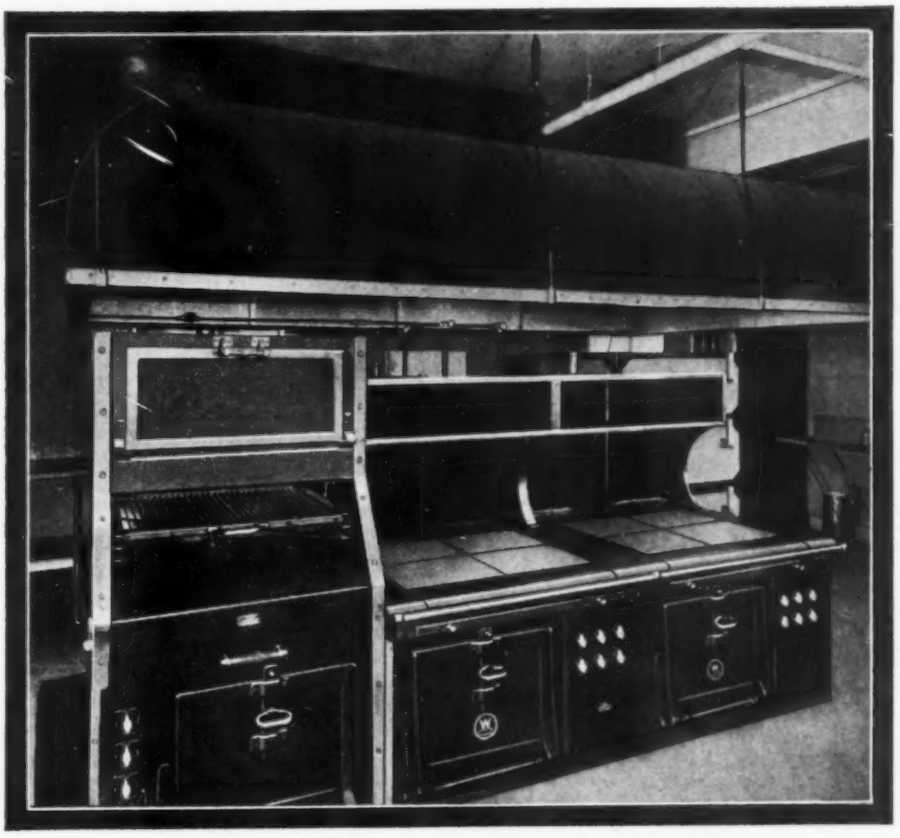
If you have not read the first "Medical Follies," by all means get it; if you have not read "The New Medical Follies" don't be unduly upset.

HOME PROBLEMS

By CAROLINE L. HUNT.[2]

In "Home Problems," Caroline L. Hunt presents a series of essays of home life that formerly were published in *The Chautauquan*. The book is divided into nine chapters interpreting the home in the light of present day changes with respect to machine labor, the modern "independent woman" and the other social relationships that make home life complicated. There is much of definite value in Miss Hunt's presentation of home problems.

[1] Boni and Liveright, New York.
[2] Whitcomb & Barrows, New York.



THE HOUR BEFORE MEALTIME

THAT'S when this room jumps to importance in hospital life. That's when it matters whether the kitchen is clean, cool and comfortable—whether the heat is uniform—whether the range and the oven and the broiler work the way you want them to.

A completely equipped Westinghouse electric kitchen meets the demands of that hour. The food that goes up to patients is savory and delicious—the kitchen staff is working in ideal conditions—the equipment can be relied upon for clean, strong heat whenever a switch is turned.

You will find much of interest about electric cooking equipment in Westinghouse Catalog No. 280. Write for your free copy today

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Westinghouse

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Heavy duty ranges, bake ovens, broilers, steam tables.

Coffee urns, electric griddles, waffle bakers and sandwich toasters.

For complete index of advertisements refer to the Classified Directory

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You have given considerable thought to selecting your floor, be it Linoleum, Rubber, Tile or Terrazzo. Have you given that same thought to selecting a Cleaner that will preserve and protect its beauty?

The most modernly equipped Hospitals keep their floors attractive, retain for many years their original appearance of newness, so essential to Hospital welfare—through the regular use of

BRITEN-ALL

THE "PROTECTIVE CLEANSER"

Are You Acquainted with this Product?

Do you know that BRITEN-ALL is recommended and approved by leading Floor Manufacturers? Not only that, many of them are using it themselves.

There is a reason.

Our liberal offer to all Hospitals makes it easy to conduct a test for yourself.

We will send you a drum of BRITEN-ALL—use it for 30 days, and if for any reason, you do not wish to keep it, you are at liberty to return the unused portion at our expense. Fair enough, isn't it?

VESTAL CHEMICAL CO.
SAINT LOUIS, U.S.A.

VESTAL CHEMICAL COMPANY, ST. LOUIS, MO.
Gentlemen:

☐ Please send us a Drum of BRITEN-ALL on the above offer.

☐ Please send us further particulars about BRITEN-ALL.

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Address.....

FOOD VALUES FOR CALCULATING DIABETIC AND NEPHRITIC DIETS

By LOUISE M. KEEGAN, New York[1]

These tables of food values were calculated from Bulletin 28, U. S. Department of Agriculture. They include the protein, fat, carbohydrate and calories of energy in foods desirable for use in diabetic and nephritic diets, and weights from five to one hundred grams of each food are given. Tables of weights and measures are also given in both grams and ounces, with directions for converting values from one to the other, and information as to various types of scales available. Directions for making urine tests and for administering insulin are included together with a good bibliography.

For nurses and others who have not had training in calculation of diets, this book will be very helpful; for the doctor and dietitian it will be a time saver.

FEEDING THE FAMILY

By MARY SCHWARTZ ROSE, Ph.D.[2]

When the first edition of this book was published, about ten years ago, it was eagerly adopted by students of nutrition and became practically the universally accepted text in home economics schools. In the meantime, the rapid advance in the knowledge of foods and nutrition supplied us with numerous books on this "newer knowledge" which supplemented but never displaced Mrs. Rose's book. Her many readers will therefore be pleased with the new edition bringing the subject matter up to date, though the presentation is confined to one viewpoint throughout. For example, the chapter on "Food for the Baby" has been much revised, yet no recognition is given to some of the later methods that are being successfully used in infant and child feeding.

BOOKS RECEIVED

PRACTICAL NURSING For Male Nurses in the R.A.M.C. and Other Forces. By Colonel E. M. Hassard, A.M.S. (Retd.) and A. R. Hassard. Second Edition. William Wood & Company, New York, 1927. Price $3.50.

PRINCIPLES OF CHEMISTRY. By Joseph H. Roe, Ph.D., Professor of Chemistry, George Washington University Medical School; Lecturer in Chemistry, Central School of Nursing, Washington, D. C.; Captain, Sanitary Division, U. S. Medical Reserve. Illustrated. C. V. Mosby Company, St. Louis, 1927. Price $2.50.

THE NORMAL CHEST OF THE ADULT AND THE CHILD, Including Applied Anatomy, Applied Physiology, X-Ray and Physical Findings. By J. A. Myers, Associate Professor of Preventive Medicine, Medical and Graduate Schools, University of Minnesota; Medical Director, Lymanhurst School for Tuberculous Children, Minneapolis. Williams & Wilkins Company, Baltimore, 1927. Price $5.

MANAGEMENT OF THE SICK INFANT. By Langley Porter, B.S., M.D., M.R.C.S. (Eng.), L.R.C.P. (Lond.), Professor of Clinical Pediatrics, University of California Medical School; Visiting Pediatrician, San Francisco Children's Hospital; Consulting Pediatrician, Babies' Hospital, Oakland; Consulting Pediatrician, Mary's Help Hospital, San Francisco, and William E. Carter, M.D., Instructor in Pediatrics, University of California Medical School, San Francisco. Third Edition, Revised, Illustrated. C. V. Mosby Company, St. Louis, 1927.

[1] and [2] The MacMillan Company, New York.

Catgut that cannot be

held answerable for infection

"Since no joy is greater than that of service in such a sanctuary [the operation theatre], no responsibility is greater than that which falls daily to our lot." The responsibility stressed by Moynihan in these words surely relates to the quality of the catgut employed by the surgeon no less than to any other element in the technic of an operation, and much more than to many factors, for catgut alone is frequently made to bear the full responsibility for infection—a charge obviously without warrant where reliable materials are used. Our catgut as removed from its containers can never be held answerable for infection; with it "suture infection is impossible."

In sum, our catgut has won the confidence of surgeons because it is sterile, possesses maximum strength and elasticity, and is soft and pliable. And the very feel of it tells the expert at once that it will "run even" when a knot is being tied.

NEW BRUNSWICK Johnson & Johnson N. J., U. S. A.

For complete index of advertisements refer to the Classified Directory

100% in "bran" is as much a standard as U. S. P. in "drugs"

As a physician you naturally deal with definite quantities and strengths in your prescriptions. When you prescribe Kellogg's ALL-BRAN to combat faulty elimination you can rely upon the definite results you anticipate being accomplished. You can prescribe with confidence.

For Kellogg's ALL-BRAN is 100% bran — 100% effective. Entirely different from part-bran products which may be 50% bran or 25% bran — or more or less. And which can be but partially effective.

Kellogg's ALL-BRAN prevents as well as relieves constipation in a pleasant manner. It is delicious served with milk or cream and with fruits or honey added. Or it may be used in many kinds of appetizing cookery with corresponding beneficial results.

Sold by grocers everywhere. Served at hotels and restaurants. On dining-cars. Made by Kellogg in Battle Creek.

Kellogg's ALL-BRAN

NEWS OF THE HOSPITALS

Arizona

Work has begun on the construction of a third unit, to cost approximately $115,000, for St. Joseph's Hospital, Phoenix. A fourth unit is planned to complete the building program of this hospital.

California

Plans have been completed for the new St. Elizabeth's Infant Hospital, San Francisco, which is to be a 100-bed institution in charge of the Sisters of Charity of Saint Vincent de Paul.

Illinois

Plans have been completed for a new four-story addition to cost about $40,000 for St. Mary of Nazareth Hospital, Chicago.

Indiana

Contract has been let for the construction of a new wing to add fifty beds to Lake County Tuberculosis Hospital, Crown Point.

Louisiana

Contract has been awarded for the new $123,000 interns' home for the Charity Hospital, New Orleans.

Maryland

The South Baltimore General Hospital, Baltimore, is to have a new four-story nurses' home costing approximately $150,000 and a $100,000 addition to the hospital.

The state legislature of Maryland has appropriated $850,000 to complete the Epileptic Colony at the Springfield State Hospital, Sykesville, to erect two cottages at the hospital and two dormitories at the Rosewood State Training School for the Feebleminded, and to construct an additional building at the Crownsville State Hospital for the Negro Insane, Waterbury.

Massachusetts

The new two-story ward building for Waltham Hospital, Waltham, is nearly completed. The addition is being erected at a cost of $50,000.

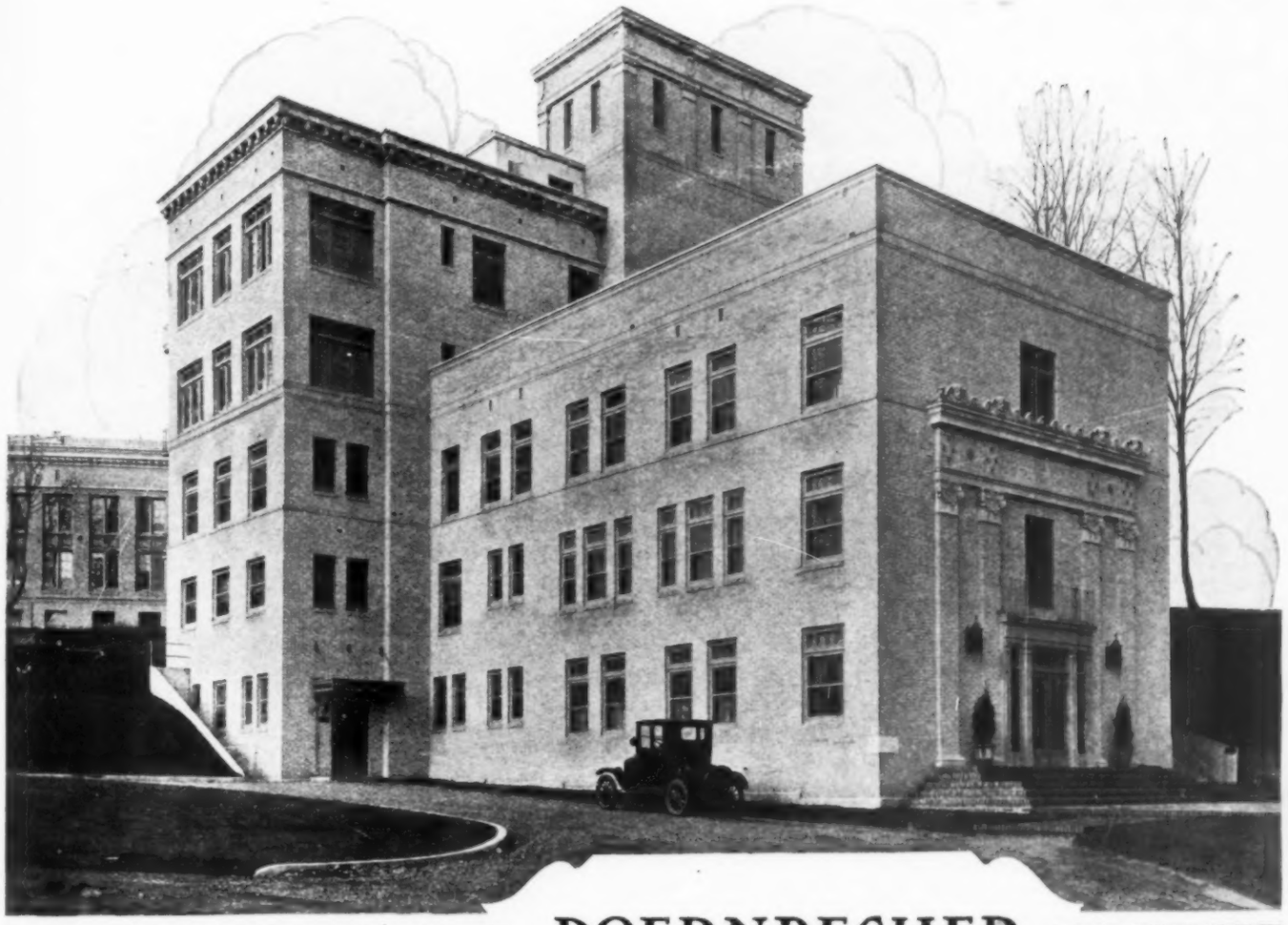
Salem Hospital, Salem, is to have a new nurses' home. Contracts have been awarded for a four-story structure to cost approximately $300,000.

Minnesota

A bond issue has been authorized for the Ancker Hospital, St. Paul, for the building of a new tuberculosis wing. The bill authorizes the county to issue $140,000 and the city $70,000 in bonds for the building and equipment. The building is badly needed as there are already thirty-three patients who cannot be cared for until the new wing is completed.

Missouri

Mercy Hospital, Kansas City, is to receive $25,000 from the estate of the late Charles W. Armour, and St. Luke's Hospital, Kansas City, is to receive $5,000.



Architects
Lawrence & Holford, Portland, Oregon

Contractors
Alaska Plumbing And Heating Company, Portland, Oregon

DOERNBECHER MEMORIAL HOSPITAL

PORTLAND, OREGON

Another of the great many hospitals equipped with Johnson Heat Control: to automatically keep each room and department accurately at the required temperature, to reduce heat waste and fuel consumption and fuel expense 25 to 40 per cent per year. Such service, with such endorsement, makes Johnson Heat Control worth considering for your hospital: be it already erected, in course of construction or about to be built. Complete details furnished on request.

JOHNSON SERVICE COMPANY
MILWAUKEE, WISCONSIN, U.S.A.

AUTOMATIC TEMPERATURE CONTROL SINCE 1885
BRANCHES IN ALL PRINCIPAL CITIES

Other Hospitals Johnson Equipped

St. Luke Hospital, Kansas City, Mo.
St. Elizabeth Hospital, Boston
Northern Pacific Beneficial Association Hospitals, St. Paul, Minn. Missoula, Mont.
Vassar Brothers Hospital, Poughkeepsie
Christian Church Hospital, Kansas City, Mo.
Mercy Hospital, Pittsburgh, Pa.
St. Luke's Hospital, Chicago
Tennessee Coal & Iron Employees Hospital, Fairfield, Ala.
Finlay Hospital, Dubuque, Iowa
Eastern Oklahoma Hospital, Vinita, Oklahoma
Masonic Orphans Home, Fort Worth, Texas
St. Joseph Hospital, Mason City, Iowa
General Hospital, Mt. Pleasant, Iowa
And Others

JOHNSON
HEAT CONTROL

Money for Hospitals

HUNDREDS of hospitals by their experience have proved that men trained in financial campaigns raise more money more easily than untrained men.

Over $208,500,000 has been raised for religious and philanthropic institutions by members of this organization.

Plan now for that new building, or addition, or to clear off an old debt. Write us fully your desires.

Campaigns undertaken anywhere. We care for every detail.

We have raised money in recent years for dozens of hospitals from Pawtucket to San Francisco.

"Financing Philanthropy" quarterly paper, free on request.

Member Joint Board of Campaign Counsel and Planning

HEDRICK, MARTS & LUNDY, INC.

527 Fifth Ave., New York

This nurse is wondering if the heat has penetrated to the center of the package. She delivers doubtful dressings.

This is a SAFE NURSE. She takes no chances. She uses a Diack control every time she sterilizes—she KNOWS.

YOUR HOSPITAL IS NOT A SAFE HOSPITAL

UNLESS

DIACK CONTROLS

FOR STERILIZATION

ARE USED TO PROVE

HEAT PENETRATION

USED IN ALL EFFICIENT HOSPITALS

Safety Should Accompany Service

100 FOR $6.00

A. W. DIACK

5533 Woodward Ave. DETROIT, MICH.

New Jersey

Plans have been announced for the $2,000,000 expansion of the Jersey City Hospital, Jersey City, which will double its capacity, providing 1,200 beds, and it will also double the capacity of its nurses' home.

New York

Three New York hospitals benefit by the will of the late Solomon Friedman. The bequests are as follows: $7,500 each to Montefiore Hospital and Mount Sinai Hospital, and $5,000 to the Hospital for Joint Diseases. The last named hospital also receives a remainder interest of $5,000.

The $500,000 estate of I. D. Levy has been given to St. Joseph's Hospital, Lawrence, L. I., to be remodeled as an annex. An equity of $20,000 in the estate and $14,000 for the remodeling of the building was contributed by a group of Cedarhurst business men.

The formal dedication of the Long Beach Hospital, New York, was recently celebrated. The hospital was erected at a cost of $215,000.

The board of directors of Bronx Hospital, New York, recently accepted the resignations of eight physicians. The physicians resigned because the choice of new medical members has been given to the board instead of to the physicians.

The gynecological clinic being conducted at Beth Israel Hospital, New York, under the direction of Dr. D. Katz, is to be discontinued until August 1.

The new four-story unit of St. Mary's Hospital, Amsterdam, was opened for public inspection March 13.

The West Side Hospital and Dispensary has moved to 446 West Forty-third Street, New York, and in order to provide for the cost of furnishing and equipping the new hospital it will conduct a public subscription of $30,000.

The new home of the Bay Ridge Sanitarium, New York, has been completed, according to the announcement of Dr. Earl H. Mayne, president.

Ohio

Contract for the new forty-bed Souder Memorial Hospital, Troy, has been awarded. The building is to cost approximately $200,000.

Rainbow Hospital for Crippled and Convalescent Children, Cleveland, has begun construction of its new buildings, which are to cost approximately $600,000.

St. Luke's Hospital, Cleveland, announces a gift of $400,000 from Mr. and Mrs. F. F. Prentiss.

A campaign is being conducted to raise $200,000 for Mercy Hospital, Cleveland.

A building fund of $300,000 is sought by White Cross Hospital, Columbus, in a campaign now being conducted.

Oregon

The new nurses' home, the third of the group of new buildings for Multnomah County Hospital, Portland, is under construction. This is to be a four-story structure and completion is expected by the first of July.

Pennsylvania

Plans have been completed for additions to Mount Sinai Hospital, Philadelphia, to cost $1,000,000. With this extension the hospital will contain four complete units, a central administration building, a new dispensary building, a new hospital building and a nurses' home.

Tennessee

A new addition to be used for private and operating rooms is under construction for Riverside Hospital, Knoxville.

Photographs and Case Reports

The case report made up solely of verbal description is bound to be ambiguous. No two persons understand exactly the same thing from reading even the most accurate writing.

A photograph is an accurate record of conditions as they existed, easily understood and interpreted correctly by any competent physician. It is for this reason that photographs are a scientific requisite in case reports. But, in addition, the time saved in eliminating much of the writing of descriptions pays for the photographs with plenty to spare.

No hospital is completely equipped which lacks adequate photographic apparatus. Ask your Eastman demonstrator to tell you about photography in the clinic.

Eastman Kodak Company

Medical Division Rochester, N. Y.

THORNER'S
Silver Service

Thorner's Silver Service is made of 18% Nickel Silver with a quadruple silver plate. Wears a lifetime. Replacement through breakage is forever eliminated. It is never affected by wear or polishing.

Illustration features Thorner's Improved Three Compartment Hot Water Plate. Tea Set with reinforced bands, hard metal hinges, Silver Soldered and one-piece unleakable bottom. Covered Soup Cup with Silver Soldered handles. Sherbet Dish, Individual Bud Vase, Salt and Pepper Shakers, and Superior Grade Sectional Plate Flatware.

THORNER BROTHERS

Importers and Manufacturers of Hospital and Surgical Supplies

386-390 Second Avenue
NEW YORK CITY

Construction has begun on a new hospital building for Takoma Hospital and Sanitarium, Greenville, to cost $100,000, including equipment.

A gift of $10,000 to build a nurses' home for the new hospital at Murfreesboro has been received from Samuel H. Hodge, Chicago.

Texas

Dr. D. L. Heidrick is erecting a new hospital building in Mercedes.

Vermont

A twenty-four-room addition to Brightlook Hospital, St. Johnsbury, is to be erected this spring at an approximate cost of $75,000.

Construction of an addition to the Rutland Hospital providing fifty-four more beds and accommodations for ten nurses will be begun this spring.

Virginia

A campaign is being conducted for funds to build a thirty-four-room hospital in Luray.

The Halcyon Hospital, South Boston, has reopened as the South Boston General Hospital, South Boston.

St. Christopher's Hospital, Norfolk, is to be discontinued as a hospital and operated as a clinic for the study of medical and surgical cases.

The sum of $500,000 has been left to the Memorial Hospital, Lynchburg, by the will of Mrs. Bertha Virginia Guggenheimer, for the establishment and maintenance of a child's and maternity hospital.

Washington

The Walla Walla General Hospital, Walla Walla, recently opened, is selling benefit certificates of one hundred dollars each, entitling each holder to fifteen days' free care each year for a period of five years.

A survey of the hospital facilities of Seattle and King County has been conducted under the direction of Dr. R. G. Brodrick, director, Stanford University Hospitals, Stanford University, Calif.

West Virginia

A 100-bed institution costing $125,000 will be built to replace the hospital at Williamson recently destroyed by fire.

Wisconsin

A new addition to Plymouth Hospital, Plymouth, will be built at an approximate cost of $50,000.

The new 100-bed addition to the Misericordia Hospital, Milwaukee, was recently opened.

Canada

A gift of $50,000 has been received by the Toronto General Hospital, Toronto, from the Honorable Vincent Massey, the Canadian minister at Washington.

A permit has been taken out for the erection of a $100,000 addition to the Toronto Hospital for Incurables, Toronto, the building to contain men's living quarters and boiler rooms.

Foreign

Press notices state that two American Hospitals in southern China have been boycotted and forced to close on account of the activities of the "red" labor unions. The Canton Hospital, Canton, operated by the American Presbyterian Mission was blockaded by the unions, and food and electrical supplies shut off.

SURGICAL BAY'S DRESSINGS

What the Red Bay's Trade Mark Means

Just this!

That Bay's Cotton and Gauze products will stand up under comparative tests with any similar products anywhere and at any price.

That Bay's Adhesive Plaster is made of carefully selected and rigidly inspected materials. Into its compounding goes the knowledge that comes from long experience, plus the instinctive skill that is required to maintain uniformity under varying conditions.

Frankly, we have a reputation to establish and every employee is alert to insure that each and every package of Bay's products will meet the most exacting expectations of a meticulous profession.

Bay's Surgical Dressings are marketed through all supply houses

THE BAY COMPANY

Bridgeport, Connecticut

New York — Philadelphia — Chicago — San Francisco

THE BAY COMPANY, Bridgeport, Conn.

Gentlemen:

Kindly send me a free testing sample of Bay's Adhesive Plaster.

Name.....

Address .....

Name of local dealer.....

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UNIFORMS
BEFORE you purchase uniforms for your next class of pupil nurses, let us quote you on them. A large part of the capacity of our garment factory is devoted to making pupil nurses' uniforms, aprons, and caps. We use materials that insure satisfactory wear, and give them a double shrinking. Our uniforms are cut to fit well and look well, and are carefully made by capable operators. Perhaps we'll save you a little money on your uniforms. We'd like the opportunity of quoting you at least.
WILL ROSS, Inc.
457-459 E. Water St.,
MILWAUKEE, WIS.
Manufacturers, Importers, and Distributors of a complete line of hospital supplies and equipment.

Trade News and Publications

Water Heating Garbage Burners.—Catalog No. 75 of the Kewanee Boiler Company, Kewanee, Ill., was recently received. This catalog is devoted to describing, illustrating and pricing water heating garbage burners, Tabasco water heaters, steel storage and pressure tanks, air receivers, gravel basins, and blow-off receivers.

Commercial Car Magazine.—The publication of a monthly edition of "Studebaker Service" which will be devoted to the interests of every type of commercial car manufactured by the Studebaker Corporation of America, South Bend, Ind., is announced. This will be sent to distributors, dealers and operators of commercial cars. The first issue contains information on operation and service.

Electric Clocks.—The Warren Telechron Company, Ashland, Mass., has issued two attractive catalogs that describe its electrically controlled clocks. These clocks are made in several graceful models as well as the regulation wall clocks. By plugging into a light socket after setting the clock to the right time it will run indefinitely and eliminate the work of winding, regulating and maintaining the clock. The product is suitable for all hospitals and nurses' homes, and the catalog is a valuable addition to the files of the hospital.

Ambulances.—The Studebaker Corporation of America, South Bend, Ind., has issued an attractive booklet describing the various types of ambulances that they are offering to hospitals. The illustrations show several hospitals, and there are fully illustrated and described many types of ambulance that are now on the market. The booklet is one of the best that has been issued by an automobile company in many years.

Electric Appliances.—The Edison Electric Appliance Company, Chicago, has recently mailed out to hospitals its 1927 price lists, together with descriptive matter on its products. Several new items are listed this year and the sheets are suitable for filing.

Physical Therapy Equipment.—The Frank S. Betz Company, Hammond, Ind., has issued several new catalogs showing its various lines of physical therapy equipment. Portable units and diathermy sets are described and there is a circular on the general lines of office and hospital equipment that is sold by this company.

Anesthetics.—The Ohio Chemical and Manufacturing Company, Cleveland, has sent out to hospital superintendents a folder describing several of its products that are in daily use in most hospitals.

Water Softeners.—The Permutit Company, New York, is sending out an attractive letter in which is described the experiences with water softeners at the Olive View Sanatorium, Olive View, Calif. This company is also offering to send its booklet "Reducing Costs and Improving Hospital Service" upon the return of the postal card that is enclosed.